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BULLETIN OF THE AMERICAN IRIS SOCIETY

FEBRUARY, 1944

No. 92

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THE AMERICAN IRIS SOCIETY

OFFICERS 1944

Directors:

Terms expiring 1944:	Dr. Franklin Cook	Howard R. Watkins
	Carl S. Milliken	Jesse E. Wills
Terms expiring 1945:	F. W. Cassebeer	Dr. H. H. Everett
	Geddes Douglas	Dr. R. J. Graves
Terms expiring 1946:	J. P. Fishburn	E. G. Lapham
	David F. Hall	W. J. McKee

President—Mr. Jesse E. Wills, Belle Meade Blvd., Nashville, Tenn.

Vice-President—Mr. Junius P. Fishburn, Box 2531, Roanoke, Va.

Secretary—Mr. Howard R. Watkins, 821 Washington Loan and Trust Bldg., Washington, D. C.

Treasurer—Mr. E. G. Lapham, 1003 Strong Ave., Elkhart, Ind.

Editor—F. W. Cassebeer, 953 Madison Avenue, New York, N. Y.

Assistant to Editor—Miss Marcia Cowan.

Regional Vice-Presidents—

1. Mr. W. J. McKee, 45 Kenwood Ave., Worcester, Mass.
2. Kenneth D. Smith, Benedict Road, Dongan Hills, Staten Island, N. Y.
3. John Dolman, Jr., 304 Vassar Ave., Swarthmore, Pa.
4. J. Marion Shull, 207 Raymond St., Chevy Chase, Md.
5. Mr. T. N. Webb, Durham, N. C.
6. Mrs. Silas B. Waters, 2005 Edgecliff Point, Cincinnati, Ohio.
7. Mr. Geddes Douglas, 440 Chestnut Street, Nashville, Tenn.
8. Mrs. W. F. Roecker, 3319 North 14th St., Milwaukee, Wis.
9. O. W. Fay, 1522 Isabella St., Wilmette, Ill.
10. Frank E. Chowning, 2110 Country Club Lane, Little Rock, Ark.
11. Mrs. Mary F. Tharp, Payette, Idaho.
12. Merritt H. Perkins, 2235 Fairfax St., Denver, Col.
13. Dr. R. E. Kleinsorge, Silverton, Ore.
14. Mrs. G. G. Pollock, 1341 45th St., Sacramento, Calif.
15. Mrs. Lena M. Lothrop, 1595 Glasgow Ave., San Bernardino, Calif.
- 16.

Chairmen of Committees:

Scientific—Dr. A. E. Waller, 210 Stanbery Ave., Bexley, Columbus, Ohio.

Election—Dr. George M. Reed, Brooklyn Botanic Garden, Brooklyn, N. Y.

Membership and Publicity—Mr. W. J. McKee, 45 Kenwood Avenue, Worcester, Mass.

Registration—C. E. F. Gersdorff, 1825 No. Capitol St., Washington 2, D. C.

Exhibition—Mrs. Ralph E. Ricker, 1516 Ross St., Sioux City, Iowa.

Recorder of Introductions and Bibliography—Mrs. W. H. Peckham, The Lodge, Skylands Farm, Sloatsburg, N. Y.

Awards—Mr. J. E. Wills, Belle Meade Blvd., Nashville, Tenn.

Japanese Iris—Dr. George M. Reed, Brooklyn Botanic Garden, Brooklyn, N. Y.

IRIS CHECK LIST, 1939—Lists 19,000 names of iris and parentages; over 500 pages. Price \$3.00 to members; \$4.00 to non-members.

LANTERN SLIDES—Rental Fee (to members) \$5.00. Apply to Mrs. P. E. Corey, 707 Pearl St., Reading, Mass.

THE EDITOR'S BULLETIN BOARD

■ THIS ISSUE of the BULLETIN, the first of the new year, presents its readers with the customary reports of the officers and regional vice-presidents, and also includes Registrar Gersdorff's report as registrar, a painstaking piece of work for which he deserves a vote of thanks.

Mr. Geddes Douglas, in his "Prelude to Pink," gives a masterful analysis of the origins of the many pink bud iris now appearing among the seedlings of our leading hybridizers. This is the group of light coral pink iris variously known as "Seashell Pinks," "Raspberry Blondes," "Flamingo Pinks," "Goldfish Pinks," etc.

Mr. Leslie Cave from England makes some pertinent remarks about the names that have been given to a few of the recent American introductions, and though his comments are facetiously intended, they might well be noted.

Certain observations contained in a letter from Mr. R. J. Comstock give us pause. He points out, and perhaps rightly so, that the A. I. S. and BULLETINS have stressed hybridizing and the discussion of new varieties to an inordinate degree. We would be very much interested in receiving the reactions of other members of the Society on this subject so that we may be guided as to the future content of our publication. Recognizing the need for articles that will be helpful to beginners and to new members of the Society, it is planned to devote the next issue of the BULLETIN almost entirely to such material.

F. W. CASSEBEER, *Editor*



F. W. Cassebeer

*A vista in Mr. Fishburn's garden at Roanoke, Va., where the iris
seem to be part of a stage setting with the
Blue Ridge Mountains as a backdrop.*

REPORT OF THE PRESIDENT, 1943

JESSE E. WILLS

■ IN MAKING my first report as president, I am glad to say that the Society seems to be in remarkably good condition considering the handicaps imposed by the war. Membership, for instance, as shown by the treasurer's report, has held up very well, so that there is very little change from a year ago. As a matter of fact, there has not been much change in the last two or three years. The treasurer's report also shows that the Society is in sound financial condition. The credit for this good showing under such exceptional conditions belongs to our members, not to the officers. It demonstrates that our Society has a sound foundation of people who are really interested in iris and who keep up their memberships year after year in spite of the trying times through which we are going.

The officers and directors have been very cooperative and helpful to a new and inexperienced president, and I appreciate it especially because I know from my own experience how heavy the pressure of other things has been on them during the past year. Sheer lack of time, not merely to execute plans, but to think out plans, has handicapped all of us. For this reason we have not been able to initiate much that was new, and the work of the Society has consisted largely of carrying on already established routines. The last regular meeting of the directors was held over two years ago, just before Pearl Harbor. Since the war, not only the annual meetings of the Society, but the winter meetings of the directors, which used to be a regular custom, have been omitted. We have missed these, since a great deal was accomplished by them in a very short time. Agreements cannot be reached and work cannot be carried out nearly so fast or efficiently through the medium of correspondence. We have many much more important reasons for hoping for an early and victorious end to the war, but we will also be glad when the checks upon our iris growing and our Iris Society can be removed.

Since there is to be no annual meeting and iris visiting was cut down to a minimum, the officers and directors thought it very important to keep the standard of the BULLETINS high in order to hold the Society together. Five BULLETINS were issued during 1943, but the first one really belonged in 1942. I think Mr. Cassebeer did

an excellent job on these, and correspondence indicates that the Society feels this way, also. We hope to do as well during the coming year, but we must ask again for more help for him. He needs more contributions from the members and more pictures, particularly black and whites. If you have some comment that you want to make or something of interest to report, which still does not seem sufficient to justify a formal article, write him a letter about it (typewritten, if possible). Some years ago a very interesting feature of our BULLETIN was the correspondence from members all over the country: brief extracts from letters with comments on varieties, breeding, diseases, the weather, species, and many other things of interest.

Judging from reports, iris breeding is continuing at a very considerable rate, although a few breeders are in the service and a few others have had to suspend their work due to lack of help. Introductions during the past year seemed to have fallen off rather considerably, although I have not checked the exact figures with Mrs. Peckham. After the war, the result should be that many fine new varieties will be available to us all. Possibly another good result will be that some other varieties will not be introduced because circumstances will have delayed this just long enough to prove that they are not quite needed.

No annual meeting is planned for 1944, but I hope that in so far as it is possible, members will get together in regional or local meetings and that there will be some visiting during iris season. The president hopes to do a little visiting himself, but cannot say now how much. Regional meetings are held regularly in New England and in Southern California, to name two instances, and gatherings of similar nature can be organized in other regions. I would like to point out, however, for the benefit of new members that some regions are so large and the membership is so scattered that holding a regional meeting involves almost as much travel and expense as might be involved in going to a national one.

Even though our membership has held up very well, annual memberships are about 50 less than they were last year, and, as usual, we have lost a good many members who failed to renew more than one or two years. These must be replaced, and it will take the co-operation of each member of the Society to do this. Thought and study are being given to devising means whereby the Society can be more helpful to new members.

In conclusion, let me say that I am always glad to hear from you on any subject, and that we welcome suggestions, comments, and criticisms. It may not always be practical to carry out every suggestion that we receive, but we are none the less eager to receive them. I am very well aware that there is a good deal about growing iris and the American Iris Society that I don't know, but if I can't answer your questions satisfactorily, I will at least acknowledge them and pass them on to some of our older members who can be of service.

REPORT OF THE SECRETARY

HOWARD R. WATKINS

■ THERE IS very little numerical change in A. I. S. membership to report for 1943. On December 1, 1942, there were 1075 paid memberships; today there are 1054. Last year the report showed 75 life members, 2 sustaining members, 32 triennial members, and 966 annual members. This year's report shows the following:

Life	74
Sustaining	2
Triennial	59
New annual members	138
Renewals—annual members	781
Total Annual	919
Total all classes	1,054

Sixty new members have already paid dues for 1944, and renewals from old members are beginning to come in even though the first notice of dues payable has not been sent out.

The number of non-pay memberships remains the same as last year—26 free and exchange members and 4 honorary members. All four of the honorary members live in foreign countries, and only two of them can at present receive mail from this country.

One new life member was added during 1943—Miss Lulu Miles of Barrett, Minnesota.

I report with regret that death notices have been received during the year for seven members. Two of the seven were life members—Mr. James B. Smith, San Francisco, Calif., and Mrs. J. L. Dodge,

Lexington, Ky. Dr. C. Stuart Gager, who died last August, was one of our charter members and had served for several years as chairman of the election committee.

Thirty-five members resigned this year, and 118 failed to make any response to our three appeals for renewals of membership. As usual, more than 50 per cent of the lapses were of members for two years or less—47 for one year only, 18 for two years.

Sixty-seven *Check Lists* have been sold during 1943, 62 to members at \$3.00 a copy and 5 to non-members at \$4.00 each, making total receipts from *Check List* sales \$206.00. Sales of “Dykes on Iris” and back BULLETINS have brought in an additional \$131.09.

REPORT OF THE EXHIBITION COMMITTEE

MRS. RALPH E. RICKER

Exhibition Chairman

■ THE EXHIBITION COMMITTEE is happy to report that a number of interesting and splendid exhibits were held in cooperation with the American Iris Society during 1943.

Let us become show conscious. The growing of flowers and the displaying of them brings to many the opportunity to enjoy the beauty of a flower, which is one of God's greatest gifts. The displaying of many varieties at a show brings enthusiasm into the life of the exhibitor and the visitor. It brings joy, it brings encouragement, it brings peace and it brings relief from the nervous tension of war. These attributes are needed more than ever in time of stress and strain. The returning soldier will need the beauty of flowers and the message of beauty that a well-grown bloom expresses.

So let us become show-conscious in 1944. Let us plan a simple but attractive exhibit for next spring, so that the message and beauty of the flowers will be with those who are required to remain on the home front and will be awaiting those who return from war.

Today the love of flowers has become so general that as a part of your patriotic service to “keep the home fires burning,” we hope you will share your flowers through the medium of a show, for in these days of uncertainty and anxiety we want more rather than less of beauty in our lives if we are to preserve our mental and spiritual balance.

Already plans are being made for an iris show this coming spring by New York, Chicago, Boston, and Sioux City.

REPORT OF THE TREASURER

E. G. LAPHAM

AMERICAN IRIS SOCIETY

Statement of Cash Receipts and Disbursements

For the Year Ending November 30, 1943

RECEIPTS :

Annual Memberships	\$2,807.00	
Triennial Memberships	213.00	
Sustaining Memberships	30.00	
Life Memberships	50.00	
English Iris Society Memberships.....	17.10	
Sale of "Dykes on Iris".....	29.42	
Sale of Check Lists.....	197.00	
Overpayments	1.83	
Gift	5.00	
Sale of Back BULLETINS.....	100.17	
1943 Listing Commercial Directory.....	5.00	
Advertising	174.00	
Credits and Completed Payments.....	3.25	
Interest on Government Bonds.....	181.50	
Interest on Savings Account.....	13.32	\$3,827.59

DISBURSEMENTS :

Publishing BULLETINS :		
Editorial Services	\$ 400.00	
Stenographic Services	50.00	
Printing, Mailing, Etc.....	1,568.47	
Rent	195.00	
Stenographic Services	600.00	
Office Supplies, Postage, Misc. Expense.....	230.74	
Committee Expenses :		
Awards Committee	110.00	
Exhibition Committee	58.47	
Registration Committee	39.01	
Storage on Check Lists.....	20.00	\$3,271.69

SUMMARY

Balance—December 1, 1942	\$1,483.01
Add: Receipts as listed below.....	3,827.59
Total	\$5,310.60
Deduct: Disbursements as listed below.....	3,271.69
Balance—November 30, 1943.....	\$2,038.91

AMERICAN IRIS SOCIETY

INVESTMENTS AS OF NOVEMBER 30, 1943

<i>Description</i>	<i>Face Value</i>
The Cleveland Union Terminals Company: First mortgage sinking fund gold bond, 5½% Series A, due April 1, 1972.....	\$1,000.00
Home Owners' Loan Corporation: 3% Series A bonds, due May 1, 1952/44.....	1,950.00
Northern Pacific Railway Company: Refunding and improvement mortgage bond, 6%, due July 1, 2047.....	500.00
Paramount Broadway Corporation (Paramount Building): First mortgage sinking fund loan certificate, due Feb. 15, 1955, current rate of interest 3% per annum	1,000.00
U. S. A.—2¾% Treasury Bonds due June 15, 1954/51	2,000.00
U. S. A.—3⅛% Treasury Bonds due June 15, 1949/46	1,500.00
U. S. A. 3¼% Treasury Bonds due April 15, 1946/44	650.00
Total	\$8,600.00

NOTE: The above listed bonds are in Safe Deposit Box #182 of St. Joseph Valley Bank, Elkhart, Indiana.

Funds, both checking and savings, on deposit with St. Joseph Valley Bank, Elkhart, Indiana.

Only the interest on Government bonds was deposited during the year ending November 30, 1943, as balance of interest earned during 1943 had to be sent in for collection and this balance (\$115.00 less 90c exchange) was not deposited to the credit of American Iris Society until December 8, 1943, so it will be shown as receipts for year ending November 30, 1944.

REPORTS OF REGIONAL VICE-PRESIDENTS

REGION 1

Maine, New Hampshire, Vermont, Massachusetts, Connecticut,
Rhode Island

WILLIAM J. McKEE, *Worcester, Mass.*

■ THE YEAR 1943 was a very active year in New England on matters pertaining to iris. The blooming season, although somewhat late, was nearly normal, and the gardens included more than the usual number of new introductions as well as a large number of new and interesting seedlings.

The main activities consisted of pilgrimages to the iris gardens during the blooming season and the winter meetings held at Horticultural Hall, Boston.

In writing a report in 1940, I estimated that at least 50 per cent of our members were interested in hybridizing. In checking over recent records, I found that each year additional members were becoming interested in hybridizing, and I now estimate at least 70 per cent of them are making crosses, growing seedlings, and may be classed as hybridizers.

The highlights of our members' travels during the blooming season included visits to the gardens of Dr. Graves, Mrs. Nesmith, Mrs. Tobie, Mrs. Corey, Mrs. Lowry, the Kelloggs, Messrs. Buttrick, Gage, Butterworth, Fiske, Carruth, Barker, Knowlton, Merry, Gow, Peck, my own garden, and others.

Dr. Graves' garden easily led the procession as to the number and quality of seedlings, and the meeting at the Nesmith garden, which included many visitors from other regions, reached the peak in attendance.

Our winter meetings are devoted largely to lectures, showing of colored slides, and discussions of iris topics. These meetings are well attended by members and visitors and help to keep up iris interest throughout the year.

The permanent iris ratings of 1943, listed in the October BULLETIN, were of special interest to members in New England and created much discussion. No doubt these ratings are of considerable interest to all members of the Society, especially to those who do not have an opportunity to visit gardens in regions other than their own.

The wide range between high and low ratings is always a de-

batable question and one which brings up much discussion as to their reliability. A study of the judges' ballots brings out some interesting facts. A study of certain varieties grown in different regions indicates that either the soil or the climate in which iris are grown must be a major factor in their performance. It is a well-known fact that many iris perform equally well in all regions regardless of climate or soil, and the ratings in this class usually show a narrower range between high and low.

There is also a small class of iris which requires special care when grown in other than its own region where climate is a factor. This class of iris usually makes strong new growth in the late fall, and it is not surprising that the ratings of iris in this class usually show a wide range between high and low outside of their native region. (It would be interesting to see tabulated the results of Judges' ratings of this class in their native region.)

There is also a third class of iris which perhaps for lack of a better word may be referred to as a "temperamental" class. Their performance is not dependable in certain regions. They are usually classed as the so-called "shy bloomers," are slow to become established, perform well one year and do not the next, and frequently have a tendency to produce short bloom stalks. In making a study of this class of iris, there is usually a wide range between high and low ratings. Difference in soils, I believe, is a major factor in the performance of iris in this class. For example, I have observed certain varieties perform beautifully in the dark soils of the Midwest while these same varieties do not perform so well in New England gardens. There are also varieties which bloom beautifully in New England, but which do not always perform so well in Midwest gardens. The climatic conditions in these two regions are similar. Therefore, it is safe to assume that soils must be a factor in the performance of many varieties in this class.

Wide differences in ratings, however, are not entirely dependent on localities, soils or climate, although these are contributing factors. Another factor which has a bearing on ratings, no doubt, is that of the inexperience of the judges who are added yearly to the list. I have always contended that the proper way to educate new judges is to assign them judging work to do, but it is recognized that they usually have to serve their novitiate period before they can do graduate work, and while discussing ratings there is still another factor which has a bearing on high ratings.

The ballots of a few judges indicate very clearly that they rate their own introductions out of line when compared with the ratings of other judges.

I fully appreciate that these comments on ratings are not in all cases very conclusive, but they do at least indicate a trend. I hope they may be of sufficient interest to start some BULLETIN discussion on this important subject.

It was interesting to note in visits to gardens that many of our A. I. S. members did their bit in Victory gardening. Vegetables were grown alongside of iris in many gardens, and I found considerable interest in the growing of the newer types of vegetables. The new orange-yellow tomato, Jubilee, created about as much discussion in the combination iris and vegetable garden as did our new orange tone creations in iris.

During the year the members of the New England Region conducted a symposium. A list of varieties in 17 color classifications was compiled covering favorite iris which performed well in New England, as follows:

<i>Color</i>	<i>Variety</i>
White:	MATTERHORN, WHITE GODDESS, MARY E. NICHOLLS
Cream:	OLD PARCHMENT, GOLDEN TREASURE, CAROLINE BURR
Light Blue:	GREAT LAKES, GLORIOLE, SHINING WATERS
Medium Blue:	MISSOURI, SIERRA BLUE, WEST POINT
Violet:	DEEP VELVET, AMIGO, SABLE
Purple:	LORD DONGAN, STORM KING, THE BISHOP
Blue Blend:	SORRENTO, FRANCES DOUGLAS
Red:	CHRISTABEL, THE RED DOUGLAS, RED GLEAM, RED BONNET
Brown:	LOUVOIS, BROWN BONNET
Pink and Pink Blend:	LANCASTER, CHINA MAID, MELITZA, DAYBREAK
Deep Pink and Rose:	ROSY WINGS, LIGHTHOUSE, AUBANEL
Mauve:	ORMOHR, OZONE, VIOLET SYMPHONY
Yellow Self:	GOLDEN MAJESTY, SPUN GOLD, FAIR ELAINE
Yellow Blend:	PRAIRIE SUNSET, JEAN CAYEUX, STARDOM
Yellow Bicolor:	CITY OF LINCOLN, FRANK ADAMS, MARY VERNON
Amoena:	WABASH, SHAH JEHAN
Plicata:	LOS ANGELES, RUTH POLLOCK, FLORENTINE

REGION 2

New York

KENNETH D. SMITH, *Staten Island, N. Y.*

■ DUE TO the so-called abnormal season which caused the majority of iris to bloom from side shoots, it was decided to cancel the New York show. This disappointed many people, but it was the consensus of local fanciers that if good stalks could not be exhibited, it would be an inferior show. The irony of the matter was that certain old standbys and some so-called temperamental iris threw up magnificent bloom stalks that could not have been surpassed even in a normal season.

Lately a great deal has been written about the abnormal iris season of 1943. If we delve into back BULLETINS of the A. I. S., we find many of the past seasons were also mentioned as being abnormal. The perfect season that occurs perhaps only once in every six or eight years is, in my opinion, the abnormal and not the normal one. Iris that do well in both kinds of seasons are those that deserve the credit, and more articles should be written in the BULLETIN about them. They are the outstanding iris of America.

For the past five years I have made the Southern Circuit, visiting the Blake garden at Spartanburg, S. C., the Douglas and Wills gardens at Nashville, and the Fishburn garden at Roanoke. At all places I have spent two or more days in each garden, thus enabling me to judge properly all the iris I saw. At least three of these gardens are those of fanciers, and by visiting them all I was able to see over 99 per cent of the introduced varieties, besides many promising seedlings that will be introduced in the future. In all of those gardens I could see very little difference in iris behavior or growing conditions from that in my own garden on Staten Island, with the one possible exception of EASTER MORN. Iris that rotted in those Southern gardens rotted in mine, those that didn't bloom because of abnormal seasons failed to bloom for me, and those that bloomed well put on an equally good display up here. Color sometimes varied, as did flecking. The difference in color is due, I believe, to a local condition of the soil, and I blame the flecking, which is always very pronounced in my garden, to my close proximity to the ocean. In inland gardens flecking never occurs except in cold, damp seasons.



F. W. Cassebeer

*Col. Nicholl's bold, dark purple iris, Storm King,
one of the best of the late-flowering kinds.*

EASTER MORN, which I have mentioned as the exception, for some unexplainable reason is always very much at home in my garden and is one of the best display clumps I have. It performs as well, if not better, than it does in its native state of California. However, it does not like the Southern gardens. The explanation may be because these gardens are so much farther South and are in bloom two to three weeks earlier that a late freeze always catches the bloom stalks on EASTER MORN as it is one of the earliest of the tall bearded to bloom.

Whether this coming season be normal or abnormal, Mrs. Smith and I again extend a cordial invitation to all members of the Society to visit our garden at Dongan Hills, Staten Island. We expect a grand display of bloom; many new iris have been added and



F. W. Cassebeer

*A bed of new iris against a spirea hedge in the Editor's garden
at Blauvelt, N. Y.*

promising seedlings have been sent for trial from other hybridizers. As very few of my own seedlings bloomed last year, some 1800 will be seen as two-year clumps, with the addition of the new crop for 1944. The Editor is also glad to welcome visitors to his garden at Blauvelt, and the tall bearded planting at the Brooklyn Botanic Garden under the direction of Dr. George M. Reed should be at its best.



REGION 3

Pennsylvania, New Jersey, Delaware

JOHN DOLMAN, JR., *Swarthmore, Pa.*

■ THERE IS little to report from Region 3 which has not already been covered in the BULLETIN.

As most members know by now, the wet weather and the infestation of soft rot just before and during the blooming season were ex-

tremely widespread throughout the East; and this region suffered very heavily. Mr. Wister's fine planting at Swarthmore College was hard hit and required heroic measures to save many varieties from being wiped out.

This collection was moved two years ago to newly prepared soil, which Mr. Wister reports was heavily enriched, to the advantage of the peonies but not the iris. Growth was lush and rampant, but rot resistance was very poor. In my own garden there was a marked difference in resistance between those areas where organic fertilizer had been used and those where it had not. No area escaped entirely, but those containing humus suffered far more severely. Others in the region report similar experiences, which suggest the conclusion that even good drainage will not insure freedom from rot in a turkish-bath season if there is much humus in the soil.

The infestation also demonstrated another point—that while certain varieties with so-called “tender” ancestry are more subject to rot, even the hardiest and healthiest varieties can succumb when conditions are bad enough. I saw rot this year in varieties which had never given trouble before and which I had supposed were practically immune.

In the Philadelphia region we noted the same peculiarity reported from Nashville by Mr. Wills—namely, that much of this year's rot began in the foliage, in the stems, or even in the flowers themselves, and worked downward to the roots. Borers may have been a contributing factor, but in many cases no trace of them could be found; flowers and stems turned to jelly much more rapidly than the borers could possibly work.

The question that interests us now is whether the prolonged summer drought, which followed in this region, has done enough good to the bearded iris to compensate for the spring losses. Some of the weakened plants looked for a while as if they were going to dry right up, and most seedlings have made poor growth. But the strong-growing varieties like GOLDEN MAJESTY, MELITZA, FRANK ADAMS, and MISS CALIFORNIA show good fall growth, in some cases on plants that lost all the larger rhizomes. Can they catch up in time to bloom in 1944? We wonder.

Members of the A. I. S. may be interested to know that the Barnes Arboretum, which is part of the Barnes Foundation, in Merion, Pa., has recently added a collection of bearded iris. It was selected and planted under the direction of Mrs. Barnes in consultation with Dr.

John M. Fogg, Professor of Botany at the University of Pennsylvania. On the invitation of Mrs. Barnes, your regional vice-president gave two lectures last spring to the students of the Arboretum, on the culture and hybridization of bearded iris. Some of his hearers, though well advanced in botany and horticulture, had never seen a real collection of modern iris, and later visited the Swarthmore collection and others in the region with considerable interest.



REGION 4

Maryland, District of Columbia, Virginia, West Virginia

J. MARION SHULL, *Chevy Chase, Md.*

■ FOR SEVERAL years climatic conditions in Region 4 have become more and more adverse for the growing of tall bearded iris, culminating (I hope) in the 1943 season. Since there was scant room for growing worse, we may all look forward confidently to a better iris season this year.

From all over the region, and from beyond, come reports of unusually severe losses from rot. This I attribute to a period of excessive rainfall and high temperature early in the growing season. Then followed a prolonged drought comparable to that of 1930. Such stems as escaped destruction by rot came forward but slowly under the lack of rainfall and were not only short but small-flowered and often poorly colored, so there was nowhere an abundance of material of exhibition quality.

So far as I know, the Takoma Horticultural Club was the only group in the region that had the courage to stage a definite iris show, their 27th annual event of the kind, which was opened to the public on May 20. Whereas in previous years 50- or even 100-variety classes were in evidence with two or three competitors, this year it was thought useless to ask for a larger variety group than 25, and there were only two exhibitors who contributed even that modest number.

Condition of bloom offered was only fair and in no case abundant. There was thus little real competition, and prize ribbons had little significance. Recognition as the best stem in the show was given to GREAT LAKES with three blooms out.

While I have predicted a better iris season for this year, there is



F. W. Cassebeer

*Another view of the mass display of iris to be seen in
Mr. Fishburn's garden.*

reason to expect that we will still be feeling the effects of last year's drought. The fact that there was less than an inch of rainfall in July and again in August will undoubtedly result in fewer rhizomes growing to blooming strength, so that even if good growing conditions in spring should bring fine quality, we can hardly expect any great abundance of material from which to select.

The rigid ban against the use of gasoline at the time made it impossible for any of us to visit other iris gardens of the region, even those relatively nearby, and nobody had seedlings he dared risk presenting at the one show we did have.



REGION 5

North Carolina, South Carolina, Georgia, Florida

T. N. WEBB, *Durham, N. C.*

■ THERE IS very little to report from this region for the past year. Several late, hard freezes were very difficult on iris in general this

year. The flower stalks on many of the old reliables were injured, and an extremely late cold spell killed the flowers on others. On top of this, during the flowering season those that had managed to come through were burned by a hot, dry wind.

What varieties stood up? GREAT LAKES proved its worth, but I still am not able to grow it as I saw it in Nashville. PALE MOONLIGHT was grand. CASTALIA, a lovely iris that has never received the recognition due it, was as good as ever.

GOLDEN MAJESTY was majestic. SPRING PROM, which was very slow in becoming established for me, was superb. GOLDEN TREASURE and MISS CALIFORNIA were probably the outstanding iris in Dr. Hane's garden. SPUN GOLD was a little disappointing. Hall's BUTTERCUP LANE looked good on a one-year plant.

Good whites are still scarce and indistinct. MOUNT CLOUD is our most reliable performer, but it is not a pure white. SNOW FLURRY, which I have never been able to bloom, was badly hurt by the cold. GUDRUN is still a favorite white. In the newcomers, MARY E. NICHOLLS is my favorite.

Two of the outstanding plants in my garden happened to be planted next to each other. MULBERRY ROSE is outstanding in every respect and should become very popular. Why have the judge and critic overlooked this iris? FORTUNE was its neighbor. The two colors are beautiful together.

PRAIRIE SUNSET is a lovely thing and deserves all the praise that has been heaped upon it; however, I have not seen it well grown in this region. I have not been so fortunate as to have it bloom for me, but look forward to another year.

May the coming year be full of victories on the battle front, and make the iris world as well as the Axis see pink and red.



REGION 6

Michigan, Ohio, Indiana

MRS. J. F. EMIGHOLZ, *Cincinnati, Ohio*

■ MRS. SILAS B. WATERS, regional vice-president, underwent a serious major operation in December and is therefore unable to make her report. I am glad to say that she is making a fine recovery and, it is hoped, will be entirely well for the iris season.



REGION 7

Kentucky, Tennessee, Alabama, Mississippi

GEDDES DOUGLAS, *Nashville, Tenn.*

■ REPORTS FROM different sections of Region 7 indicate that the poor growing conditions experienced in Nashville were widespread. Successive freezes and thaws throughout the winter and spring of 1943 resulted in an infection of rhizome rot unprecedented in our many years of iris culture. Summer brought no surcease from this evil, and a prolonged drought, scant relief.

In spite of the difficulties of travel, Nashville was fortunate to have as visitors Mr. J. P. Fishburn, Mr. K. D. Smith, Dr. and Mrs. Henry Grant, Mrs. Thomas Nesmith, Mr. Carl Carpenter, Mr. and Mrs. William Cahoon, and others.



REGION 8

Wisconsin, Minnesota, North Dakota, South Dakota

No report.



REGION 9

Illinois, Iowa, Missouri, Nebraska, Kansas

ORVILLE W. FAY, *Wilmette, Ill.*

■ THE IRIS blooming season of 1943 "in and about Chicago," was covered in the July BULLETIN. Since then the young seedlings which will bloom next June have been transplanted, hoed and cultivated every evening all summer from early June until they stopped growing in October. We had a good summer with rains nicely spaced to keep the young plants thriving. By November the seedlings were fully grown, fat and healthy, with from two to six, and sometimes eight, side shoots, some of which were a foot tall. In November they were put to bed for the winter and covered with loose, dry leaves sprinkled between the rows to a depth of about six inches. A few corn stalks are now laid on top of the leaves to keep them from blowing away. Mr. David Hall stretches chicken wire over the top of the leaves to hold them down. In the spring the wire is rolled up and stored, so it can be used over and over for many years. I am not fortunate enough to have any chicken wire,

and it cannot now be bought for this purpose, so I use corn stalks. For many years I have covered with excelsior, my favorite covering, when it can be obtained. It is a good insulator, stays put, and does not blow away. It leaves the garden very clean when it is removed in the spring, and contains no weed seeds or tree seeds as do straw and leaves. If you live as far North as Region 9, iris should be covered in the winter to get best results. Even very hardy varieties may be heaved in the winter and their root system damaged if they are not covered.

I have been curious to know just what type of soil tall bearded iris like best, whether slightly acid, neutral or alkaline, and as I have the use of a commercial model Beckman pH. meter in the laboratory where I work, I have made many tests of garden soil during the past two summers. The pH. scale ranges from 1 to 14; 1 to 7 is acid; 7 is neutral, and 7 to 14 is alkaline. I began by testing samples from beds where iris grew perfectly, and in every case I found a reading above 7 and as high as 7.8. Then from beds where iris grew poorly, and where it took two years after transplanting for a seedling to bloom, I took samples and got pH. readings as low as 6.2 and 6.4. Agricultural lime has been sprinkled over these beds, and in another year we will be able to know whether the iris grow better or not after this treatment. I know of some very healthy iris which are growing in almost pure ashes.

It seems that very little is known about the life cycle and habits of the iris borer through all of its stages, so this summer about the middle of July, while I was transplanting iris, I dug up two fine fat iris borers. They were about the diameter of a lead pencil and $1\frac{1}{8}$ inches in length. Each had hollowed out a home for himself inside a rhizome. A coffee can was filled two-thirds full of garden soil, the iris roots with the borers were transferred to the can, and the lid with a few holes punched in it was clamped on tight. Every few days an inspection was made. On August 20 both borers had been transformed into a hard-shelled mahogany brown shiny chrysalis. The lower half of the body is jointed in rings, and could be moved from side to side, so I think they work themselves up through the soil by this movement. Several times I buried them two inches deep and in a few days they were back up on the surface. On October 9 the first moth emerged from the chrysalis through a small slit on the shoulder and damaged the brown shell almost not at all. The next day the other moth came out. These moths were dark

brown, almost the color of garden soil. The wings lie flat and give the moth a triangular shape. These moths were covered with thick fur, which was almost one-eighth of an inch long on their shoulders and chests, so they are all equipped for night-flying when the temperature is below freezing. During the day they refuse to fly, but at night they are very strong flyers, and seem to be irresistibly attracted to a bright light. From October 10 to November 1 several more moths were caught at night by using automobile headlights. Several of these moths were photographed in color. This habit of flying directly into a strong light suggests a way of destroying the moth, as a torch may be placed in your garden with a tub of water beneath it to catch the moth after it has singed its wings, or an electric light surrounded by a cage of charged wires may be hung in the iris garden on October nights. These lights are used in warehouses, where peanuts and chocolate beans are stored, to destroy moths. Through towns north of Chicago a fast highway parallels the Northwestern Railroad, and the narrow strip of land between the two has been planted to iris for miles. Borers do not bother these iris at all, and we think the moths are destroyed before they have time to lay eggs by flying directly into a fast moving train or car. It is my opinion that the moths mate as soon as they emerge, and the eggs are layed on iris plants, grass or weeds, and especially on the lower branches of evergreen trees where the moths hide during the day. Do not plant good iris near an evergreen tree. I think the eggs hatch in the spring and the young larvae start walking until they find an iris plant where they settle down and spend the summer.

Each fall for many years A.I.S. members of Region 9 have held an annual fall luncheon in Chicago. These meetings have been held after the garden work for the season is finished, either the last Saturday in October or the first Saturday in November. This year's meeting was held Saturday, October 30, in the clubrooms of the Chicago Bar Association in the heart of Chicago. Forty members attended the meeting and had a most enjoyable informal and profitable afternoon. Many showed a number of their best slides and told of their aims and achievements. The Kodachrome slides are the feature of these meetings as each detail of many outstanding new iris can be observed by the members who otherwise might not have the opportunity of seeing them. This year 16 good iris plants donated by members were won as door prizes.

REGION 10

Oklahoma, Arkansas, Texas, Louisiana

No report.



REGION 11

Montana, Idaho, Wyoming

MRS. MARY F. THARP, *Payette, Idaho*

■ WHILE THE purpose of this paper is to report iris activities of Region 11 for the 1943 season, it is, in reality, an iris salmagundi (without spice, at that).

The Spring of 1943 will go down in history as the four-million-dollar frost. Several nights of freezing temperature, beginning May 11, resulted in serious damage to all fruits in important sections of Idaho. Temperatures of 27 degrees and lower for several nights practically wiped out crops in some areas; in others, damage was more spotty but still generally heavy.

Although fruit men often carry insurance against hail, there is no insurance covering damage by frost; many growers suffered complete loss. An exception to the above is a grower who is a very ardent iris fan and a member of the A.I.S., and who, if he can get competent help, expects to spend considerably more time with his iris next year.

This all leads up to the fact that, considering the freezing weather, many iris were nipped in the bud and failed to open, while many varieties failed even to bloom; still others either had very short bloom stalks, or sent up stalks only on the south side of the plant.

The iris that bloomed normally were unusually large, tall and with exceptionally clear tones. The whites and pastels really "went to town." My greatest disappointment was CHARLOTTE MILLET, and my biggest heart throb was when my plicata seedlings blossomed. STAINED GLASS as well as GARDEN MAGIC were new to my garden this last season. Both did well and were much admired. In my opinion, GREAT LAKES is one of the best blues; it never disappoints. GLORIOLE does not do well for me; neither does BLUE DIAMOND, which always catches the late frosts, or they catch it.

While Mother Nature at times plays havoc with our plans and expectations, an iris lover never really gets discouraged—there is

always something to which to look forward. My varied correspondence attests to this. Which correspondence, by the way, is just one of the nice and interesting things about being a member of the A.I.S.

What I particularly enjoy about the BULLETINS are the theories advanced by different members. I was much interested in the discussion on whether it was necessary to brush each stigma with pollen. So often I have found a blossom which had a heavy application of pollen on one stigma, but never on all three. While I have never let any pod mature but those that I have hand pollenized, I had often wondered if the bees took time out to pollenize all three at the same time, or if they would use a different pollen on each stigma in the same flower, or if we were all wrong in the supposition that it must be applied to all three. I had hoped for further discussion and information on this subject.

I liked our October BULLETIN, especially the article "Adios: A late Iris Drift," by Louise Blake, and "Southern California Replies," by Lena Lothrop. I wonder if we will ever learn that we should *not* say "This and that is not good," but rather, "I do not care for it," or "It does not do well in our region."

The general opinion is that 1944 will bring many amazing things, so why not a *red* or *pink* iris for this year?



REGION 12

Utah, Colorado, Arizona, New Mexico

MERRITT H. PERKINS, *Denver, Colo.*

■ IN THIS Western country of "magnificent distances," the gasoline restrictions have had a most sobering effect on the plans of the Denver iris lovers who wished to renew their visits to gardens in other parts of Colorado and in some of the neighboring states as well. Even Colorado Springs, with the test and experimental gardens of Mrs. Marriage and Dr. Loomis, was too far away and not all of us were able to get to Boulder in season to see the J. D. Long collection at its best. Those who did were particularly interested in SUNSET SERENADE, a seedling of PRAIRIE SUNSET; BLUE SHIMMER, the unusual plicata; GARDEN FLAME, a fine red; SPUN GOLD, OLA KALA, GOLDEN SPIKE, and GOLDEN GLOW among the yellows; and

two of the blues, MOUNTAIN SKY and BLUE ZENITH. ELMOHR, the WILLIAM MOHR seedling introduced by Dr. Loomis, and ORMACO were other favorites, with PRAIRIE SUNSET, of course, and OLD PARCHMENT also exciting much interest.

Several of these varieties were seen in the Denver gardens of Robert E. Ewalt, Everett L. Cline, and Le Moine Bechtold, and a number of others should bloom here another season. Mr. Cline's comment on one plicata group is interesting: "Regardless of the opinion of some of the experts that too much attention lately has been given the yellow ground plicatas, I think there is a place in all iris gardens for some of these and was glad to see TIFFANY receive proper recognition in the ratings. I have grown this variety for a number of years and it is satisfactory in every way—form, color, substance, and long blooming season. TIFFANY is low-priced now, but of all of these plicatas I have seen, which do not include CORITICA or FRECKLES, I like it best."

Several here have commented favorably on Kenneth D. Smith's Unofficial Iris Symposium in the BULLETIN and have expressed the hope that Mr. Smith will continue this work.

In a reminiscent mood, as the winter season begins officially, one may recall the local gardens of not so many years ago in which everyone had a few "flags"—"a blue one, a white one, a yellow one," at least—with even the ancient HONORABILIS still in evidence. Then a few of the Dominion strains appeared and the parade began, until now there are many modest gardens in Denver in which a number of the Dykes' Medal winners and their outstanding companions of later years are to be found. And as winter comes, spring must not be far behind—with its promise of the first blooms here of more of the new ones.

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REGION 13

Washington, Oregon

No report.

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REGION 14

Northern California, Nevada

MRS. GEORGE GORDON POLLOCK, *Sacramento, Calif.*

Notes from a Regional Vice-President's Diary:

■ WITH ENOUGH iris in the garden to replace in the house the tired holly arrangements and the pyracanthus that the birds saw first, can it be winter? CHINA MAID always visits us a second time, and this year there are AMIGO and RADIANT and Hall's No. 40-24 to arrange with clumps of saxifrage about their base. The blossoms are of splendid size and color, but the stems less straight than in the spring.

Early spring clean-up in the iris garden is most important when a warm week or two in February has started a new growth that the March rains flatten into the ground. The soft, slimy leaves are ideal breeding places for slugs, snails, and iris borers. After the leaves have been raked up and the rhizomes exposed, a spray of Bordello may be used. Repeated twice at intervals of ten days, the spray will act upon all stages of the development of the larvae, leaving the garden free of pests during the entire blooming season.

Not how to spend our penny, but how to spend our gas coupons, becomes the problem this year. The trip to Berkeley is a "must," for there one may see in close proximity the gardens of Carl Salbach, Prof. Mitchell and Prof. Essig, and public transportation is available almost to their gates. Almost like a little Annual Meeting to encounter along the paths Mr and Mrs. Clarence White, Harold Johnson and his mother, Mr. and Mrs. Larry Gaulter, Willard Pankost, Prof. Jory, and Mrs. Chester Nimitz, the wife of Admiral Nimitz, for whom Mr. Salbach is to name one of his new iris.

A second spring without any large organized flower shows and iris shows in Region 14. Some will perhaps be glad to escape the long rows of cut blossoms in milk bottles, but others will miss the beautiful arrangements of flowers and foliage and the massing of colors which inspire one to go home and rearrange the garden picture. Most of the garden clubs continue an active organization, di-

viding their interest between Victory gardens and local Red Cross projects, proving to be public spirited groups that may be called upon at any time to assist in activities of a civic nature.

A very real addition to the membership list of the A. I. S. is the name of Dr. Robert N. Bramhall, of Fair Oaks, Calif. He reminds one of Dr. Harry Everett and Mr. David Hall and brings to his propagation of iris the same skill that made him a leader in his profession. The gentle slopes of his estate well above the frost belt are ideal for iris experimentation.

Some fine THE RED DOUGLAS seedlings and bicolors of the Cayeux type bloomed this spring.

Kenneth Smith's article on iris in the war effort recalls another part iris has played. When a large quantity of HAPPY DAYS, SHINING WATERS, PURISSIMA, FRIEDA MOHR, and fine older varieties of iris were to be discarded, permission was asked and granted to plant them about the foundations and walks of the base hospital at Mather Field, the flying and bomber school near Sacramento. Not many know that flowers and plants are discouraged within the field hospitals because of the lack of suitable containers and the added work of discarding the spent blossoms. Again iris proved the "flower of flowers." The hardy rizomes survived the amateurish planting by convalescent gardeners, the plants required no additional irrigation in summer, and the tall, straight stems brought the blossoms to window height and almost within the wards themselves. I can see again the long rows of boys looking silently at the first bright flowers they had seen in months and at what to many were new members of the floral kingdom. Doctors, nurses, and patients alike expressed the hope that wherever fine iris are to be disposed of, the base hospitals will be remembered.

REGION 15

Southern California

LENA M. LOTHROP, *San Bernardino, Calif.*

■ IT HAS become a custom with the judges in this region to hold an annual luncheon meeting at the central location of Claremont during the month of March, a sort of appetizer to the iris season

which follows closely. Without exception these meetings have been pleasant occasions and every person in the group is ready and happy to contribute to their success. All judges make a special effort to be present and any matters pertaining to iris or to the policies of the Society are freely discussed.

With gas rationing and conservation of tires to be taken into account, the meeting of last March required considerable planning. We decided there would be no rating bees as there have been in other years—the rating would be left to the individual. This meeting would be the only attempt of the year to get all judges together.

Everyone seemed to think it was the most successful gathering we have had. There are 17 judges in this region, and 15 were present. Of the two who were absent, Mr. Allum is giving his services at the Air Base at Muroc, and Mr. Walker, of Ventura, regretted he could not use his gasoline for the six hours of driving that would be necessary. Our guest was Mr. Nies, who is becoming noted as a hybridizer of spurias, and there were 22 other guests, including the judges.

Mrs. Brennan prepared the attractive place-cards and Mrs. White, in beautiful old English lettering, had prepared name tags bearing the first names of each individual.

We are much pleased with our four new judges and after they were introduced and had responded, the program began. Flashes of humor shot back and forth across the table the whole, happy, informal afternoon.

Mr. White, who always gives us something to remember, talked on "My Aims in Iris Breeding and Some Conclusions I Have Reached." This was followed by questions and discussion.

Mr. Fred Taylor came next with "My Idea of a High Rating." This topic also invited discussion.

Mr. Dysart, whose specialty in iris are those that bloom more than once a year, gave a talk on this type. He told of some of some of his experiences in crossing them.

Thanks to Mr. Giridlian, I am able to present at the conclusion of this report the excellent talk which he prepared on "The Unusual Iris in Southern California."

Mr. Brennan and Mr. Carl Taylor refreshed our memories on the duties of a judge in making ratings.

Several years ago the accredited judges of this region, during one of the March meetings, organized the Southern California Iris Society.

I would not have been surprised to see it pine away and die but it shows no inclination to do so. There are quarterly meetings which rotate from one district to another. The annual meeting in June was held in the large outdoor living room at the home of Mr. and Mrs. Giridlian. Over one hundred reservations were made for the dinner which was eaten under the great oaks. A large number remained for the evening to view the A.I.S. slides.

The November meeting was held at the Community House in Plummer Park in Hollywood. Local speakers prepared an interesting program. Because of present conditions, the territory from which the membership comes has been divided into districts. Each district has a director and each director is expected to gather the members in his district together for at least one meeting during the year. A good district meeting was held here in San Bernardino under the leadership of Carl Taylor. Slides were shown and BULLETIN No. 90 was reviewed with the aid of a map of the United States. Although the BULLETIN seemed to bulge with comments of new iris, the map showed that those commented upon were in a very small section of our country.

The annual dues in this local organization are only 50c but the sale of plants, bulbs, and choice seed which are donated by members keep the treasury in solvent condition. This year the ambition of the society is to be realized in the publication of an annual. (The shortage of paper may affect this plan.)

This society has been the means of bringing a number of new members to the American Iris Society.

The report of new Southern California iris was given in a recent BULLETIN. I doubt if it is generally known in our own region or in other regions, that so many iris from other parts of the country are being grown here. For that reason I am adding a partial list, gathered from a few gardens, of recent iris which did not originate here but which may be found growing in the gardens of Southern

California. Any of these iris that make good will be hailed with delight. This list includes those registered from 1938 to 1943:

AIDA	FLORA CAMPBELL	MATTERHORN
ANNA GAGE	FLORA ZENOR	MAY DAY
ANTIGONE	FORTUNE	MELANIE
ARCTIC	FULL MEASURE	MELITZA
ARETHUSA		MING YELLOW
AUREATE	GLEN ELLEN	MISSOURI NIGHT
AUTUMN FLAME	GLOWPORT	MOONLIT SEA
AZTEC COPPER	GOLDEN EAGLE	MULBERRY ROSE
AZTEC GLORY	GOLDEN MAJESTY	
AZURE SKIES	GOLDEN SPIKE	NARADA
	GRAND CANYON	NED LEFEVRE
BALMUNG	GREAT LAKES	NIGHTFALL
BERKELEY GOLD		NIGHTINGALE
BIRCHBARK	HAZEL GALLAGHER	NOBILITY
BLACK VALOR	HEIRLOOM	NOBSKA LIGHT
BLUE DIAMOND	HER GRACE	NOONTIDE
BLUE SHIMMER	HOOSIER SUNRISE	
BROWN BOY	HYLEPHILA	OLD PARCHMENT
BROWN THRASHER		
BUCKSKIN	ICY BLUE	PATRICIA
BUTTERCUP LANE	IDANHA	PINK RUFFLES
	ILSE LOUISE	PRAIRIE SUNSET
CALIFORNIA PEACH	INDIANA NIGHT	PRINCE OF ORANGE
CANYON GLOW		
CAPTAIN WELLS	JAKE	RED AMBER
CAROLINE BURR		RED BONNET
CEDAR ROSE	KATY	RED GLEAM
CHAMPAGNE GLOW		RED VALOR
CHICORY BLUE	L. MERTON GAGE	REMEMBRANCE
COPPER CASCADE	LAKE GEORGE	ROSARIO
COPPER ROSE	LAKE HURON	ROYAL COACH
CORITICA	LANCASTER	RUBIENT
COURS-LA-REINE	LATE SUN	RUTH POLLOCK
	LORD DONGAN	
DAYBREAK	LORI MAY	SABLE
DEEP VELVET	LOUISE BLAKE	SALAR
	LOUVOIS	SALLY ANN
EDNA HICKS.		SAMOVAR
ELEGANS	MAGIC CARPET	SARACEN
ELMOHR	MAIDEN BLUSH	SIERRA SNOW
ELSA SASS	MAJENCIA	SIR MARK COLLET
	MARIMBA	SNOQUALMIE
FAIR ELAINE	MATULA	SNOW FLURRY

SOUTHERN PACIFIC	THELMA JEAN	VIOLET SYMPHONY
SPUN GOLD	THREE SISTERS	VIRGIN
STARDOM	TIFFANY	WAKARUSA
STELLA POLARIS	TISHOMINGO	WEST POINT
TEA ROSE	TOBACCO ROAD	WHITE CITY
THE ADMIRAL	TOKEN	WILLIAM A. SETCHELL
THE SENTINEL		WINTER SHADOWS
THE WHITE SENTINEL	UNIQUE	WINTER CARNIVAL

THE *UNUSUAL* IRIS IN SOUTHERN CALIFORNIA

J. N. Giridlian

WE IN Southern California are constantly talking about our "unusual" weather, so perhaps I will be forgiven if I say a few words regarding our "unusual" iris. By that I mean iris species that are seldom met with in this part of the country.

With us, iris genus seems to fall into three main groups from the cultural standpoint. First, we have those that anyone can grow successfully. In this group are the tall, intermediate, and dwarf bearded iris; *spurias*, *unguicularis*, and the Dutch and Spanish iris. These are grown everywhere and their ease of culture accounts for their popularity.

In the second group are those species that no one can grow successfully over a period of years. In this group we may include such types as the *oncocyclus*, *Regelia*, *Pseudoregelia*, *Xiphioides*, or the English iris, and some of the species in the Juno section. This does not mean that these types are impossible to grow, but I have yet to meet anyone who has been able to flower them for more than two years in succession. They all seem to deteriorate and perish in time. We have not yet discovered their needs and requirements.

In the third group are those that only the experienced gardener and the iris specialist have been able to grow successfully, but which with a little judgment and understanding anyone should be able to grow. Such types are the *Evansia*, *Siberica*, *reticulata*, "Californica," oncobreds and nearly all of the Apogons, both Asiatic and native, fall in this group. It is concerning this last group that I wish to make a few observations in the hope that more of us will attempt to grow them in our gardens.

It seems to me that the greatest stumbling block in the culture of not only iris, but all kinds of plants, is our preconceived opinions. Southern California is still a new country. Our experience with plants dates back only a generation or two, and with iris not more than 25 years. We have not yet built up the accumulation of knowledge that exists in the European countries where plant growing has been developed nearly to a scientific formula. With us iris growing is still in the hit-or-miss stage.

We have been told that our California sun is very hot, and that certain

plants must be located in varying degrees of shade to grow them to perfection. We do plant them in shade and attend to them diligently, and when we fail, we throw our hands up and declare the plants unsuited to our climate. Did we not do everything possible to make them happy? We even planted them in the shade and watered them daily. Little do we realize that the cause of our failure was our relying on the opinions of others rather than experimenting for ourselves.

I find that many of the so-called "shade-loving" plants do far better in the sun. Such plants as fuchsia, gardenia, azalea, camellia, calla, and, lastly, nearly all iris are far more happy in the open sun than in shade. True, the foliage will be sunburned if there is an insufficient supply of moisture in the soil, but that is easily remedied. One of the temperamental iris in our gardens is *I. japonica*. It is usually leggy, top heavy and has the habit of disappearing for no reason. The remedy for all this was brought to my attention recently by a most thrifty bed of it which I came across. The gardener had planted it conventionally in the shade of an oak tree. Unfortunately, the tree had taken sick and died, leaving the iris in the open. When I saw this bed in full bloom and in perfect condition, I could almost forgive the oak for having died.

The main reason for our failure with all Asiatics and Siberians in particular is that we try to grow them as we do the tall bearded iris. The latter will get along fine in our alkaline soil and dry conditions, but the beardless section prefers soil that is slightly acid and constantly moist. Also, they seem to sulk, and barely hold their own the first season after planting, but after that they make up for lost time and do better each succeeding year.

The species native to the Eastern and Southern United States succeed particularly well in Southern California. Indeed, the Louisiana and Florida species seem to do better here than they do in their native states. In the wild these iris have a wet and dry season, but I find that this condition is not necessary to their well-being. Given a rich soil and a constant supply of moisture, we can grow them far better here than I have seen them in Louisiana gardens. A word of appreciation and encouragement should be in order at this point regarding the work being done by the Mary Sward Debaillon Iris Society of Louisiana. It is disseminating reliable and accurate information on Louisiana species by way of bulletins, test gardens, and shows. Would that we could do as much with our California native species.

Speaking of California species, it does seem strange that they should be the least known section in our gardens. I think that one could count on the fingers of one's hands the gardens in this section which grow these lovely plants. Here again it seems that a preconceived notion is our downfall. We figure that, being native, they should have dry summer conditions. We forget that in their mountain homes they have a goodly supply of moisture in the form of dew, fog and showers during the summer. In cultivation they enjoy a top-dressing of leafmold mulch. They are easily grown from seed and often flower the second season. Transplanting is best done in the winter when they are beginning to make new growth. They are very graceful, colorful, variable and useful for cutting. They readily intercross and by judicious breeding and selection we should be able to develop a very fine strain of native "Californicas."

Another reason for the lack of popularity of these uncommon iris varie-

ties and species is because the average nurseryman does not carry them in stock. There seems to exist a vicious circle that is hard to remedy: when there is no public demand, the nurseries do not carry the plants; and when the nurseries do not have the plants, the public cannot buy. The burden of educating the public seems to fall on the amateur grower, who imports, collects and cultivates new plants at great cost. He displays them in his garden and at flower shows until the public becomes interested and wants them. Once this demand is created the nurseryman steps in and capitalizes on it, often overdoing it by imaginary and extravagant claims.

I trust that these rambling observations will serve to create a little interest and enthusiasm in the growing of the less common iris species and varieties.

TRIVIAL THOUGHTS OF AN AMATEUR HYBRIDIZER

DR. FREDERIC M. HANES

■ EVERY IRIS lover should be an iris hybridizer, for several reasons. First of all, the experiences of hybridizing are good for one's ego, for after growing hundreds of seedlings without the production of a single superior specimen, one develops not only a pleasing modesty in regard to one's own abilities, but a keener appreciation of the skill of the masters who send out year after year those superb blooms that fill one with admiration—and despair!

Secondly, iris hybridizing provides the intense interest and anticipatory excitement which makes of it one of the very best of hobbies. To go out to the seedling beds in the sunshine of an early spring morning, always with the eager expectancy of finding a bloom that will make PRAIRIE SUNSET or GOLDEN MAJESTY look like has-been's, gives a tang to life unequaled by any sport I know. A good many years ago I visited Dr. and Mrs. Wiley Ayres, arriving at their hospitable home after dark. I had come to worship at the shrine of this prince of hybridizers, and we spent the evening talking of iris, he doing the talking and I the listening. We were out in the garden with the first rays of sunshine, to see a new red seedling slowly unfold. It was CHEERIO, and never have two children on Christmas morning been more thrilled than we were. Age cannot wither nor custom stale the infinite delights of hybridizing! What if the expected wonder fails to materialize? One can always get consolation from the thought that it may be a poor thing but it's

one's very own. This feeling is akin, I suppose, to that of parents who seem able always to develop a certain pride in their offspring, no matter how inferior they may be.

I take this occasion to pass over with scorn the cynical observation of my wife that the only thing that has the power to get me out of bed at an early hour is a visit to the newly-blooming iris. It is my conviction that the worm caught by the early bird richly deserved his fate, unless, of course, it was an aesthetic worm who had strolled up to look at GOLDEN TREASURE!

Hybridizing satisfies the gambling instinct so regrettably present to most of us. To get something for almost nothing—how delicious! But I pass over hastily this shocking trait of human nature to emphasize a truly altruistic attribute of iris hybridizing, and that is the naming of a new variety, purely unofficially, for some friend, to whom one gives the entire stock to have and to hold for his or her very own. This is a method of proselyting that is subtle, and often successful, in converting an indifferent skeptic to the true faith. (To prejudice the Editor in favor of my scribbling, I may state that some of these rescued sinners have become regular subscribers to the BULLETIN.)

Finally, what a vivid lesson in eugenics does hybridizing offer! It teaches us that superior parents do not with certainty produce superior offspring, and emphasizes the absurdity of those who have fondly imagined that the human race can be improved with mathematical certainty by selected matings. No one doubts that the chances of securing a product above the average is enhanced by bringing together superior genes, but experience teaches that genetic unions are fortuitous and uncertain. In spite of this, if I had a son I would make a hybridizer of him before he married. He might then, at least, take a long look at the girl's mother. For, as Oscar Wilde pointed out, "Girls grow up to look like their mothers and that's their tragedy; boys seldom do, and that's theirs."

But none of this is what I took my pen in hand to say, and I apologize for these Tristram Shandy-like digressions. Last season Norfleet Webb, having a half-dozen spare cold-frames in the nursery of the Sarah Duke Gardens, planted in them a few hundred seeds of what we fondly hoped were good crosses. In the spring he was too busy to plant the resulting seedlings until they were eight to 12 inches high. I thought we had lost our crop, for haven't the experts always insisted that seedlings should be transplanted when

only a few inches in height, and when the food of the seed was still available to the developing plant? To my surprise, which I admit may be due to ignorance, these hundreds of seedlings developed far better than those grown in out-of-door seed beds, and many of them have thrown from five to seven side stalks. They are fully three times the size of the plants from seed grown out-of-doors, and so sturdy and healthy that they make "winter gardening" almost as exciting as the bloom period of spring. And, by the way, I have never seen an article on the joys of iris gardening in the long season between bloom. He seems to me a very unimaginative iris grower who has to await the flowering of his plants to enjoy them. It is well known that the pleasures of anticipation often exceed those of realization, and, even in winter, one should be able to deck the growing plants with blooms, all the more lovely because imaginary.

THE NAMING OF IRIS

N. LESLIE CAVE

Surrey, England

■ TAKING the *Check List* as a whole, the standard of iris names is fairly high, much higher, in fact, than is the case with roses—rose catalogs read like pages from *Who's Who*—and it is rather a pity that a few hybridizers have rather let down their iris by giving them such, shall we say, odd names. These few remarks, which are not intended to be taken too seriously, have been prompted by a perusal of the latest additions to the *Check List*.

To take a few examples, Dr. Graves, who is raising very fine iris and showing us how to grow them, is responsible for one or two peculiarities. I wonder why he labeled (I nearly wrote "libeled") one of his iris OOMPH GIRL. Would-be humorous names wear very badly, as badly as an oft-repeated joke, and no one can say that OOMPH GIRL as a name is very funny. Certainly it has no claim to beauty of sound. Another seedling he has named STRAWBERRY BANKE. Why the final "e," Doctor? Can it be a hang-over from that epidemic of "ye olde" this-and-that of which so many "olde Englyshe" cafes and bric-a-brac shops here have been guilty over here? This spurious antiquated spelling has become a bad joke



F. W. Cassebeer

Adios, an unusual variegata-neglecta blend which is perhaps the latest flowering of all bearded iris.

here, and I sincerely hope it will not insinuate itself into our iris nomenclature. Then we have BEE ONE. Is this a name? If I were the long-suffering iris so christened, I'm afraid my retort to the Doctor might be "Bee Off." And BUMBLEBEE BLUE—is that worth registering? If the hybridizer wished to indicate that this was from a chance cross, would not "Lucky Blue" be more euphonious? Other dubious names laid to the door of the Doctor are HI HO and DEUCES WILD (what *did* upset Satan?)

We will now pass on to another sinner, Mrs. Tharp, who once, you may remember, jumped with both feet on a rather thoughtful article from Region 9. She says that good names are hard to find, but even with every allowance she should not be allowed to get away

with SUMMER SCHNEE. As well might one ask one's grocer for raspberry "confiture" or table "sel." One language at a time, please. Mrs. Tharp has also produced PETE'S CHOICE, which follows in style Mr. Salbach's GIRIDLIAN'S CHOICE, neither of which could have caused their inventors much brain-fag. NIFTY NUGGET is another of hers, and so is JINGO. The latter suggests to us over here jingoism, that aggressive imperialism disliked both by good Americans and good Britishers.

Mr. C. G. White appears to be the *enfant terrible* among iris-namers, and one can imagine the surprise of an admirer of one of his iris on being told that its name was AHA. TOAST and MYOMY are also children of Mr. White's brain. Do they suggest beautiful iris? Other strange names by other hybridizers are BUFFAWN, PEE TEE BEE (Bent), ELEVEN THIRTY (deForest), HALF 'N' HALF (Kellogg), which means beer over here, and WINDBLOWN (White, A. N.). The last is most unfortunate as it calls to mind the state in which our iris never appear at their best.

Mr. deForest missed something when he called his NARANJA × TIFFANY seedling TIFFANJA. Why not "Narrative"? This suggests the names of both parents and is pleasant as well. But perhaps this has already been taken.

Mr. Kenneth Smith and Mr. Sass, while generally blameless, have rather erred in using Latin adjectives as names, e.g., ELEGANS and ALBA SUPERBA. I may be thought painfully purist, but I feel that as this type of description is normally used only for species, it should be used only in that way. No fault can be found with these adjectives from the point of view of attractiveness; it is merely that I feel that they are rather "agin the rules."

Some breeders obviously go to a great deal of trouble in choosing *le mot juste*, and bouquets are here presented to Mr. David Hall and to Mrs. Whiting for their high standards.

Sources for names for iris are innumerable, as Mr. Gersdorff has remarked, and with the standard of naming generally so high, it is a pity to use slick and "cheap" names which become stale and unprofitable so soon. With literature, the arts, including music (Mrs. Peckham is, I notice, exploiting this field), the stars, and place names from the whole world from which to choose, surely it would be easy to find at least harmless-sounding names for every iris. Remember, ladies and gentlemen, that your poor iris cannot an-



F. W. Cassebeer

*Not many iris have the smoothness of finish
and clarity of color of this two-toned
mahogany variety, Jasper Agate.*

swer back, and that it is therefore hardly cricket to call them by other than the very best names you can discover. Why not keep a "christening book" and jot down as they occur to you any name which may be useful in the future? It is surprising how quickly a collection can be got together in this way.

PRELUDE TO PINK

GEDDES DOUGLAS

■ BREEDERS have long sought a pink iris. Years of careful breeding and selection have rewarded their efforts with many fine iris, not true pink in color, but nearly so. Without warning, however, there has appeared a new kind of pink iris. In some cases these iris are almost true pink, in others they tend toward lavender or blended tones of peach or shrimp, but always they are accompanied by one or both of two entirely new characteristics. The first is that of the pink bud. In our older pinks the bud was always tinged with purple and darker than the ultimate color of the flower. In these new pinks the ultimate color of the flower, as Lucile R. Steedman pointed out in the July BULLETIN, is evident as soon as color begins to show in the bud. The second characteristic is that these new flowers usually carry a beard in some shade of red.

This "pink bud" is something relatively new. It was first noticed by Dr. P. A. Loomis when his "Seashell" bloomed in 1933. The red beard is relatively older. About 1921, Miss Sturtevant received two seedlings from A. J. Bliss described as "pallidas G. 92 (12, 14) with markedly 'crimson' beards, etc." The first registered iris with this red beard, or rather "tangerine" beard as it is now called, was GOLDFISH, Wareham 1925, soon to be followed by Dr. Kirkland's BARBAROSA and Mr. T. A. Washington's red-bearded seedling in 1929-30. No doubt other breeders had tangerine bearded seedlings, but as far as this writer is able to determine, these were the first reported cases. However unrelated they seem to be, they were the forerunners of a new race of iris. Nothing seems to have come from the Bliss pallidas with "crimson beards" nor from the Washington seedling. On the other hand, BARBAROSA, GOLDFISH, and "Seashell" have figured in the parentages of the newer pinks to a more or less extent and it seems expedient to list the various pink lines in chronological order and to discuss them with reference to the various breeders who produced them. It should be remembered that these iris appeared in several parts of the country in a relatively short time. Some of the varieties discussed are newly named, some are numbered seedlings, and it is the purpose of this article to report these new iris to the readers of the BULLETIN and

to describe them without any conscious effort to evaluate their individual worth or to compare them. The separate groups are as follows:

- (1) The Wareham GOLDFISH Pinks.
- (2) The Williams seedlings, descendants of BARBAROSA.
- (3) The Loomis "Seashell" Pinks.
- (4) Mitchell's Isabellina and derivatives.
- (5) Mrs. Nesmith's MELITZA and derivatives.
- (6) The Sass Group.
- (7) The Dave Hall "Flamingo Pinks."

The Wareham Goldfish Pinks

The first of the tangerine bearded iris to be registered was GOLDFISH. It differed greatly from the other early iris of this type, for it was smaller and more flaring, and in color was the first in which the blue was subordinated in the whole flower. The base color of GOLDFISH is between fawn and buff; it has prominent deep colored lines emanating from the haft and extending down the falls. The flower is flushed with a suggestion of tangerine and the beard is full and bright. Not until 1943 was Mr. Wareham able to carry over this beard and color to a large modern iris. This year there were two. No. 43-27-1 is a blend of mauve, gold, fawn, and pink, with a broad pinkish tangerine beard. No. 43-27-2 is a blend of old ivory and pink with a beard neither so full nor so bright as the first. Both seedlings have large full-bodied flowers with heavy substance and broad segments.

The Williams Seedlings, Descendants of Barbarosa

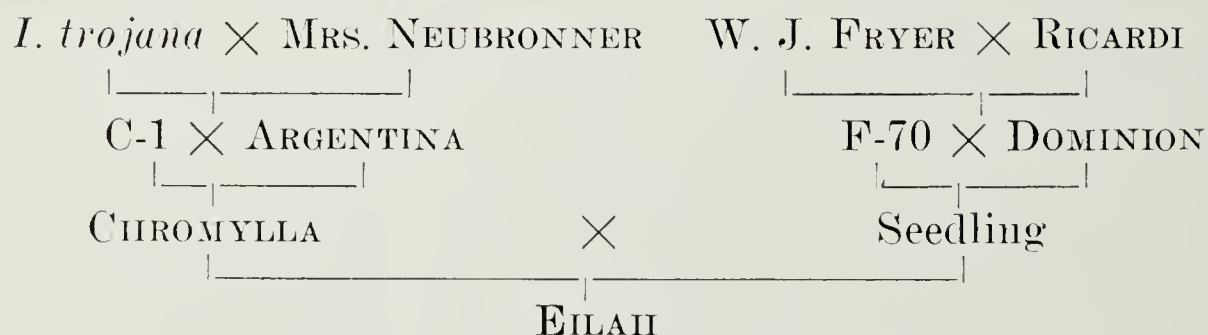
In 1931 Mr. Tom Williams, of Nashville, began a series of crosses using BARBAROSA and other iris, the ultimate object being a white iris with a red beard. First, however, he sought to improve the form and substance of BARBAROSA by crossing it with ROSE MADDER, VIOLET CROWN, MOA, ANDREW JACKSON, and his seedlings Nos. 306 and 307. The desired seedling, which was used extensively in later crosses, came not from any of the above crosses but from a chance pod on BARBAROSA. It was numbered 368-B and had an even heavier and redder beard than its parent. NUÉE D'ORAGE $\times$ BARBAROSA gave a delightful light blue plicata with a tangerine beard (No. 373-B), and SUNMIST $\times$ BARBAROSA gave a large lavender with a red beard.

In his white crosses Mr. Williams found that the beard was lost when using such iris as "Chrystallon," SNOW KING, and CRYSTAL BEAUTY, but with CHINOOK, a white derived from a lavender bi-color and DESERT GOLD, he got a grey-white seedling with a definite pinkish cast having a somewhat diminished tangerine beard. This iris was registered in 1939 as MINSTREL.

The Loomis Seashell Pinks

While this is primarily a discussion of the pink iris produced by Dr. P. A. Loomis, of Colorado Springs, Colo., it is impossible to do this without at least a partial examination of his other work. Beginning his hybridizing well over 20 years ago, his career has been long and fruitful, for while his introductions have been few, they have been of high quality and have been met with universal accord. His early introductions include CHIROMYLLA, H.M. '31; SACHEM, SHIRVAN, H.M. '32; SPRING MAID, H.M. '32, and these were followed by EILAH, H.M. '37, and MOROCCO ROSE, H.M. '37. The hybrid ELMOHR was voted Honorable Mention in 1943, and RED AMBER, in 1943, at which time his unnamed pink No. TQ-70 received the citation of Highly Commended. Of the above only SACHEM failed to receive at least one award. Several have also been awarded the Award of Merit, and it is believed that this record is without parallel.

At the beginning of his work Dr. Loomis was fortunate in getting two unusual seedlings which were, as he expresses it, "each in itself a break." No. C-1 came from the Asiatic species *I. trojana* crossed with the old variegata MRS. NEUBRONNER. No. F-70 arose from the cross of the variegata W. J. FRIER by RICARDI. Regardless of color, most of Dr. Loomis' iris trace their ancestry to one or both of these seedlings. The parentage chart of his yellow EILAH illustrates the combination of these lines:

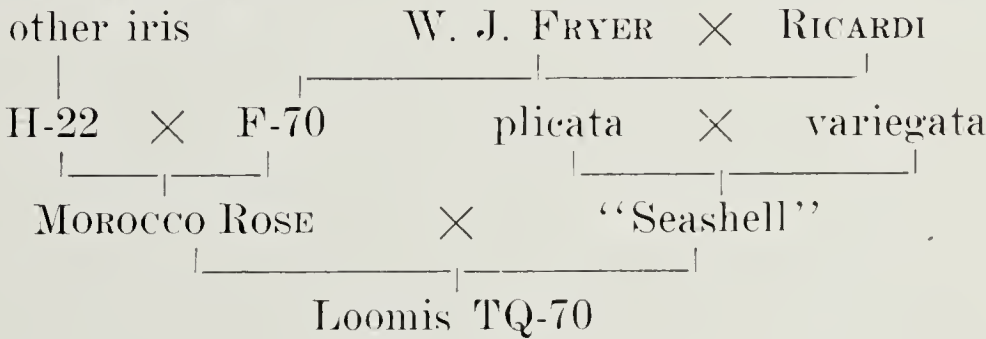


Concerning his early efforts toward pink, Dr. Loomis wrote: "RICARDI seemed to me to have a suggestion of a pink tone, and

certainly this variegata × RICARDI strain has given very encouraging results. SPRING MAID is a seedling of CORNUAULT and so has variegata blood. Seedlings from these two strains are now coming out self colored with a very promising shade of near pink.” This was written in 1936 and at that time a seedling had already bloomed for him which was to be called “Seashell” and which was destined to be the paramount “break” of his career. It was truly a new kind of iris and undoubtedly the first clear pink iris which even in the bud carried no blue and which had the characteristic tangerine beard later to be identified with iris of this kind. Its parentage was a plicata × variegata.

Concerning his experience with “Seashell” seedlings, Dr. Loomis was kind enough to write: “ ‘Seashell’ is apparently recessive. Out of several thousand crosses of this plant on unrelated blooms I have estimated that about 1 per cent come true to the ‘Seashell’ type. In later generations the number varies from 10 to 50 per cent, or more where two pink buds are crossed. The difficulty seems to be that inbreeding tends toward the albino. The seedlings are mostly paler than their parents. As to the red beard, I feel definitely that while it is very common in these new pinks, it is not the real ‘hallmark.’ The break, I think, is best shown in the pink bud. The red beard and the pink bud often part company both ways, and my impression is that these new pinks are in the nature of a mutation. ‘Seashell’ itself was an accident. Certainly there was no plan behind its breeding. One of the old English hybridists once said that plicata tended to produce selfs, so I crossed it with variegata just to see what would happen. In ‘Seashell’ seedlings it is harder to get depth of color than clear pale pinks. No. TQ-70 is not a very good iris, but it is the deepest pink for me so far.” The parentage of No. TQ-70 is:

From LENT A. WILLIAMSON
and other iris





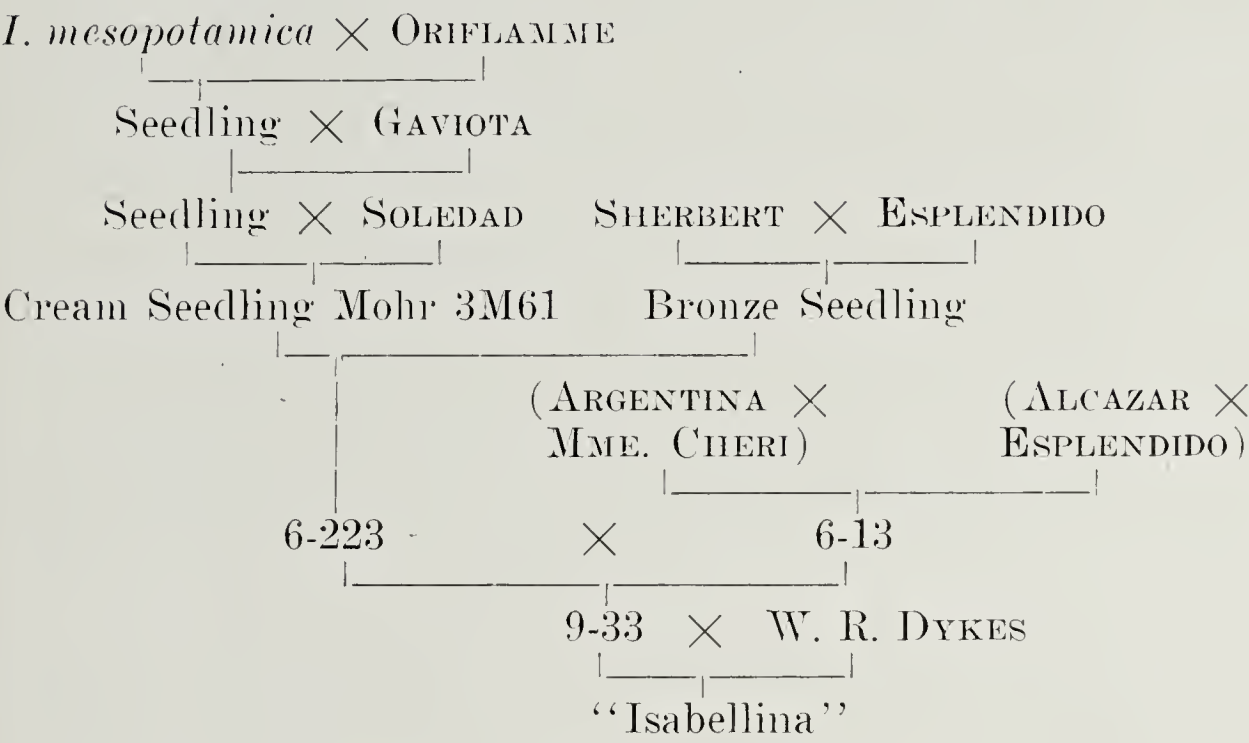
F. W. Cassebeer

*This is Gayoso, a yellow iris of great
brilliancy and garden value.*

Mitchell's "Isabellina" and Derivatives

The iris "Isabellina" was never registered by its originator and now at this date has even been discarded from his garden. It bloomed as a seedling at about the same time as "Seashell." It is described as a very large blend of pink and cream-yellow with a full tangerine beard, and its importance in the chain of tangerine bearded pinks cannot be over-estimated. Dr. Sydney B. Mitchell, originator of this iris, wrote: "'Isabellina' is either a sister seedling of HAPPY DAYS from the cross of my No. 9-33 $\times$ W. R. DYKES or from the reciprocal cross." (*Author's note:* For the purpose of this article no importance is attached to which way the cross was made, for the same blood lines are involved.) Dr. Mitchell continued, "It was named for Isabella, wife of the Duke of Alva. Sometime dur-

ing the sixteenth century this lady was reputed to have sworn not to change her chemise until her husband conquered a certain city in the Netherlands. The near flesh color of the undie when removed was given the name Isabellina and hence the iris.” The parentage of “Isabellina” is :

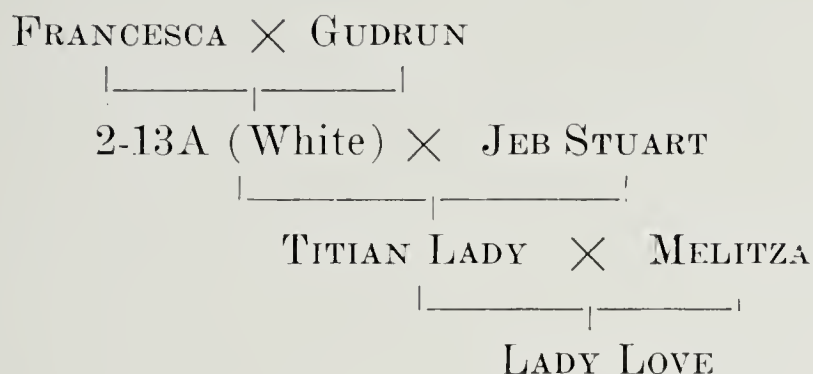


A recent addition to the rapidly growing list of tangerine bearded pinks comes from Mr. E. G. Lapham, of Elkhart, Ind. By crossing Loomis’ No. TQ-70 × “Isabellina” he has brought the two lines together. Seedling No. I-9 is the pinkest of six which have bloomed from this cross. The six ranged in color from a light cream self with a suggestion of pink to a pronounced deep lilac-pink self. All six which have bloomed so far have the tangerine beard and are of the pink bud type. Quite apart from them is another seedling which has just bloomed this past October. It is Lapham No. I-27, a deep purplish lilac pink bicolor. The falls are slightly darker than the standards and have a blackish lustre. Enhanced in beauty by a heavy tangerine beard, this iris may forecast fall bloomers in new colors. No. I-27 comes from a cross of Lapham No. X-1, a seedling of ROSALBA by RED RAY, which comes from RED SAILS × JERRY.

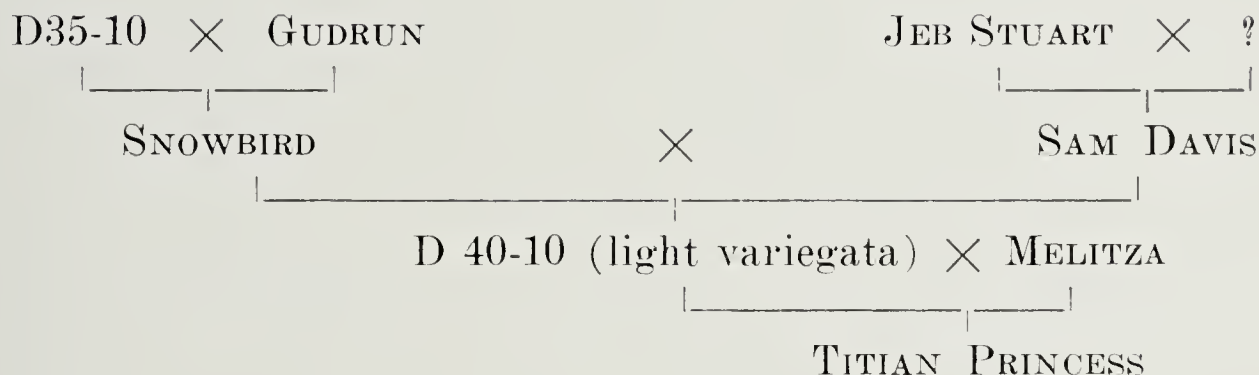
Mrs. Nesmith’s Melitza and Derivatives

The garden of Mrs. Thomas Nesmith, in Lowell, Mass., is a marvel of compactness, but even such a genius as she could not squeeze in the last few iris crosses of 1937 since most of her seedling beds were devoted to hemerocallis. Therefore she sent some of her iris seeds to Nashville and they were planted at the Washington farm. In

from a cross of TITIAN LADY by MELITZA, 12 seedlings resulted. All 12 carried the tangerine beard and all were of the pink-bud type. One of these is a pale opaque pink-white self and is registered as LADY LOVE. The parentage chart is:

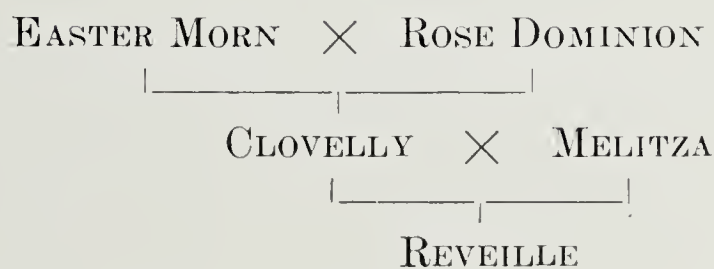


Likewise seedling No. 42-P4, registered as TITIAN PRINCESS, has a heavy tangerine beard and is a blend of fawn and rose-taupe. It is from

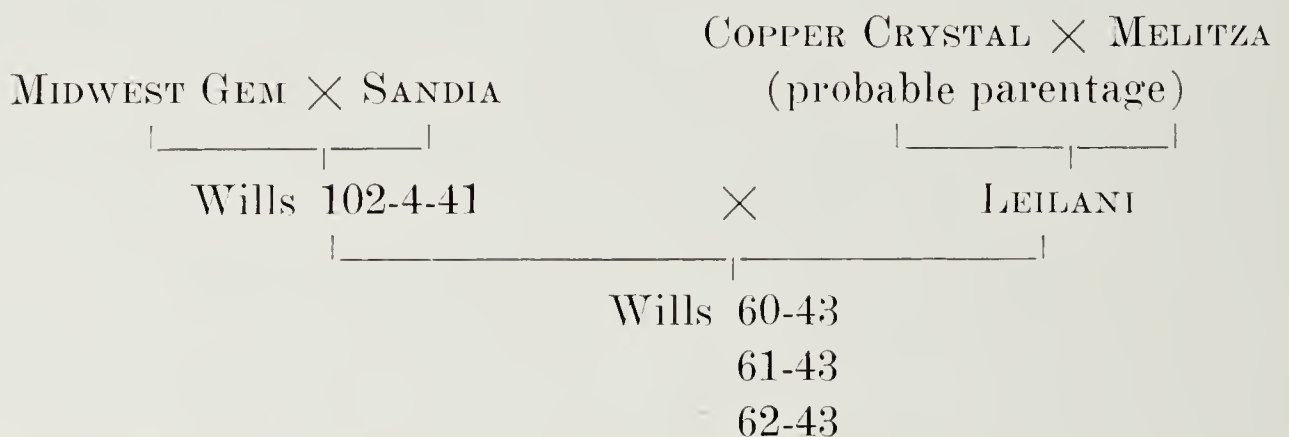


In this cross only three seedlings out of 38 carried the tangerine beard.

Two other seedlings from MELITZA merit attention. First, there is Nesmith No. 43-1, a self of crushed raspberry. This is the only seedling which has bloomed so far from a cross of JEB STUART $\times$ MELITZA made in 1941. It carries the red beard, which in this case is somewhat similar to the color of the flower. The second seedling comes from Mrs. Walter Tobie, of Portland, Me. It is colored similar to MELITZA, but has the form of the other parent, CLOVELLY. It has the tangerine beard and is from the following series:

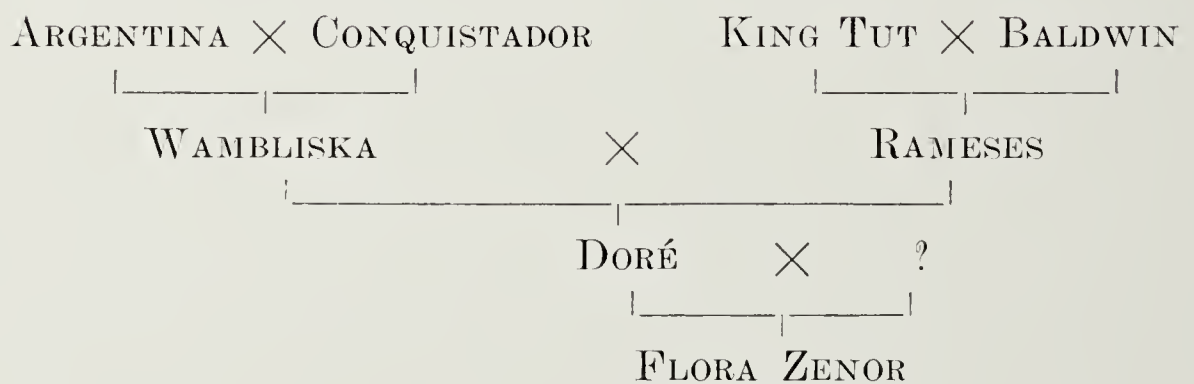


In 1941, from a cross of MIDWEST GEM $\times$ SANDIA, J. E. Wills, of Nashville, Tenn., bloomed a seedling which was a light lavender-pink self with a pronounced tangerine beard. This was immediately crossed with LEILANI, and three of the seedlings have bloomed. All three are pink and all three have the tangerine beard. The pinkest is No. 60-43, the standards being pale shell pink and the falls slightly darker. No. 61-43 was taller but in color more on the lavender side with a few short lines at the haft. No. 62-43 has no lines at the haft and is an orange pink self somewhat similar to LEILANI. The following will illustrate:



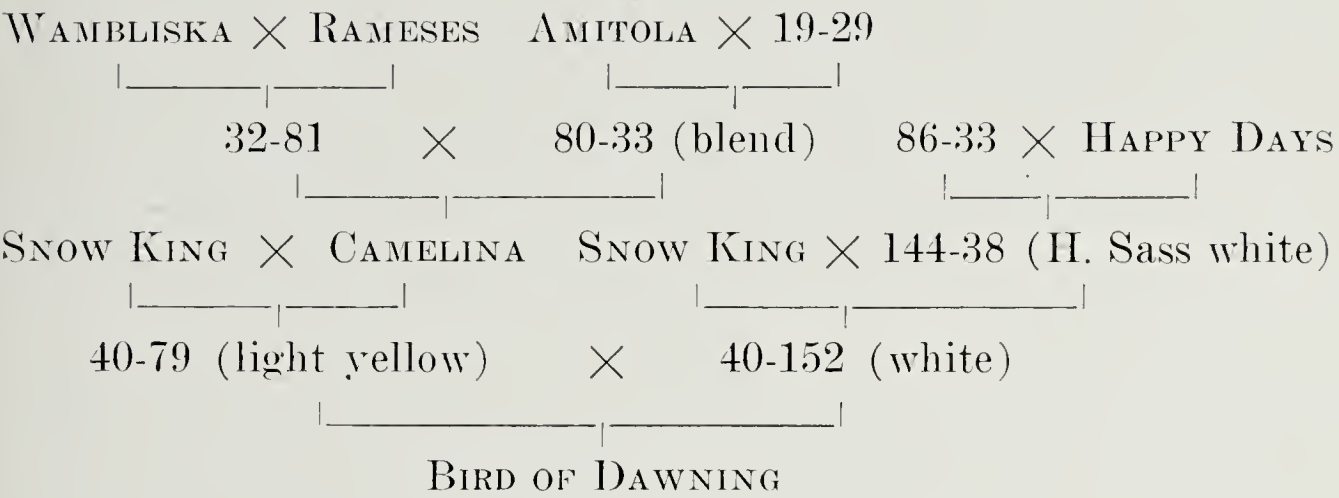
The Sass Group

The iris public needs no introduction to FLORA ZENOR, the first of the Sass iris with a tangerine beard. It is a tourmaline pink lightly flushed with tourmaline purple. It is tall and well branched and carries a rather small flower. Its parentage is:



The newest of the Sass pinks is BIRD OF DAWNING and is described by Henry Sass as follows: "Iris seedling No. 42-40 (J. Sass), registered under the name of BIRD OF DAWNING, is a cameo pink self according to Ridgway's *Color Chart*. The beard is the same color, cameo pink—not tangerine, as in the case of FLORA ZENOR, the Hans Sass iris. It is a total self. In size BIRD OF DAWNING is larger than

the new yellow OLA KALA but is slightly smaller than ALBA SUPERBA. The pollen parent of BIRD OF DAWNING, No. 40-152, is a sister seedling of ALBA SUPERBA.”



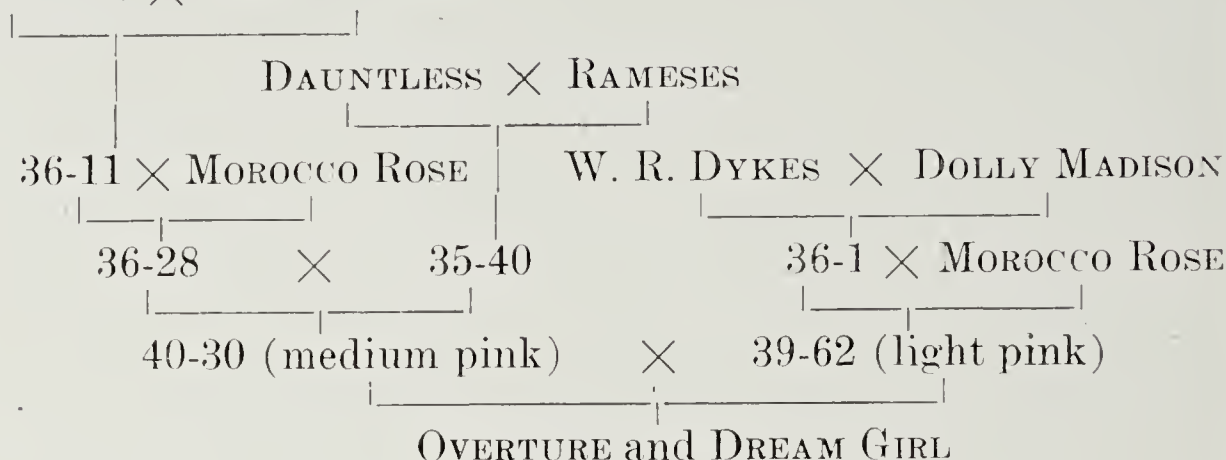
The Dave Hall Flamingo Pinks

The several seedlings which Mr. Dave Hall refers to as his “Flamingo Pinks” or his “Raspberry Blondes” in reality should be divided into three distinct color groups. First, there are several seedlings which are pink in color effect but which are really lavender pink selfs. Second, there is a group of blends of lavender, pink, and yellow, and the color effect is a smooth peachy-tan. Third, there are several which are reputed to be very close in their approach to pure pink. All have bright beards in some shade or variation of red.

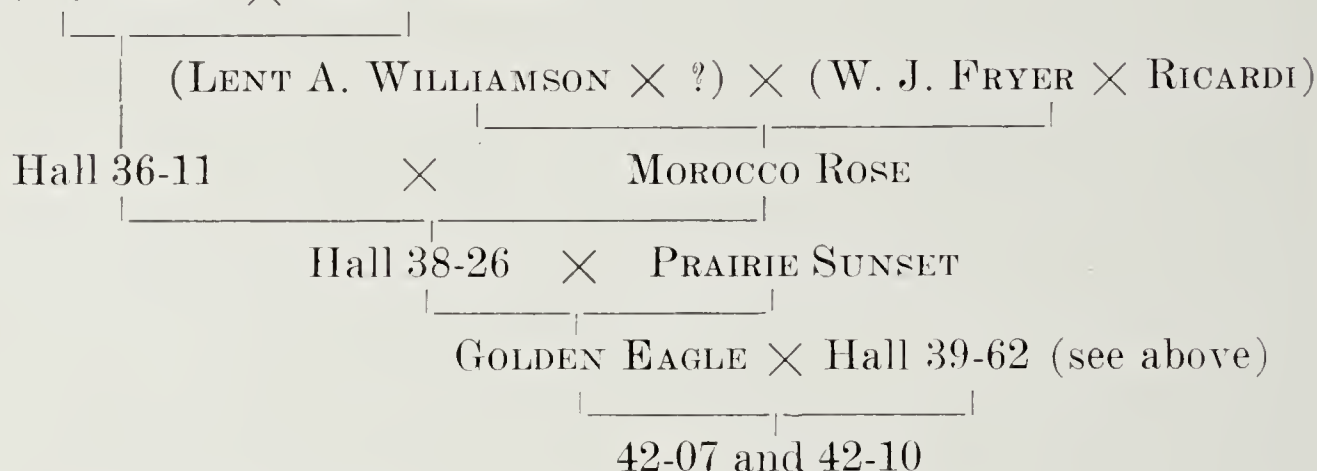
As with other breeders, there was a tangerine bearded seedling in the Hall gardens which preceded this later series. This was No. 35-27, and it came from a cross of MARQUISSETTE x DOG ROSE. It is strange that this iris did not figure in the parentage of his later tangerine bearded pinks, so strange, in fact, that Mr. Hall himself doubted the correctness of his records until he discovered that in the 1942 seedling crop these tangerine bearded seedlings came from, not one, but several crosses. Further, he found that his seedling No. 39-62 was involved one way or the other in all of these crosses save one, and this one may have been improperly marked. Mr. Hall has named four of these iris. FANTASY is from the lavender group and PREMIER from the peach colored ones. OVERTURE and DREAM GIRL, as described by Mr. Wills in BULLETIN No. 90, are the nearest

to true pink. The following two parentage charts are typical:

W. R. DYKES × DOLLY MADISON



W. R. DYKES × DOLLY MADISON



Nos. 42-07 and 42-10 are clear "Flamingo Pinks."

In conclusion, as far as this writer is able to determine, this completes the list of tangerine bearded iris, pinks and otherwise. It is far too early properly to evaluate their true worth in relation to iris of other color groups, but this much we know: the first of them were not very imposing as iris go. BARBAROSA and the Washington seedling were muddy, ungainly blues. GOLDFISH was a table iris. "Seashell" was an oddity at the best, rather small and frail. The later varieties, however, are decidedly different. They are welcome additions to our gardens from the color standpoint. Addicts of color grouping may soon learn that orange undertones give greater carrying power, and that color in the beard adds tremendously to the color effect.

From the breeders' standpoint, this may be the greatest "break" since the first big yellow, or the advent of DOMINION, or even that lucky combination of genes which gave us KASHMIR WHITE. It would not strain the imagination too much to see a new type of

“red” come from these iris; certainly, blends and combinations hitherto undreamed of are in the offing. But to the hybridizer the important thing is that some day he may look back upon these first tangerine bearded iris and say, “Truly, they were the Prelude to Pink!”

OUR MEMBERS WRITE

Whither Are We Bound?

■ I HAVE received the interesting October BULLETIN and also Kenneth Smith's Symposium on which to ballot. I find that I know less than 50 per cent of the varieties he lists; therefore, I shall not vote. I hope I am capable of judging good iris; yet, if we must “meet with the élite” yearly and regularly to judge fairly the multitudes of new hybrids appearing, it would seem best to cast out some of us accredited judges along with old iris varieties dumped on the compost pile—you need the space.

I am pleased with the idea and offer of Mr. Randall, treasurer of the English Iris Society, just included in a letter from our A. I. S. secretary, Mr. H. R. Watkins. Mrs. Randall offers our soldiers in England the opportunity to visit English iris gardens next season. This is an idea that the A. I. S. well might copy. There are now thousands of American soldiers all over the United States in localities and near cities almost as strange and foreign to them as if they were in England. It has been my hope that Region 9 might become interested in public display gardens. Too bad we haven't any; we need them right now. If there are such gardens at present over the nation, let's have their addresses given regularly in a reserved spot of the BULLETIN. This information might be of value to A. I. S. members as well as to our soldiers.

You, as Editor, would be pleased to see a growth in the Society's membership. The growth has been quite “stable” during my membership. As “The Iris Hybridizing Society,” we are doing fine, thank you—as the national American Iris Society, not so good. As an average iris fan and member, I think the cost of the A. I. S. BULLETINS is too high. If our energies are to be devoted almost exclusively to the growth, introduction, and advertising of new iris hybrids, let us reduce the membership and subscription dues and subsidize the hybridizers.

You will note from my letterhead (wild flower and bird preserve) that some of my work is to preserve the old, to create interest and the realization that we already have beauty worth seeing and saving. Some of our present modern sophistication works as much toward destruction of the good as does ignorance. Quite some time back I mentioned in the BULLETIN where a display garden might be established in this region, but the idea caused no furore of comment either in the BULLETIN or from A. I. S. members of this region. This reminds me of Mr. Weed's opinion of national iris gardens. He felt that we ought to favor the iris as *the* national flower. As I remember, his idea caused no comment in the BULLETIN. It is true that some species of iris is spread over our nation probably as widely as any other native American flower. Yet, I suppose were A. I. S. members to vote on the question of iris as the national flower, they would adopt some such variety as GREAT LAKES. Then they would want to change it, in a year or two, for a newer hybrid. Or they might elect *I. pseudacorus*—of course, it's just an immigrant—but it does fine and behaves, really gives a good example to some of our natives and to a lot of the hybrids.

—R. J. COMSTOCK.

St. Charles, Ill.

Late Transplanting of Seedlings

■ MUCH HAS been said and written concerning the growing of iris seedlings. All methods have their points of advantage. My experiences have been short compared to most hybridizers, but while I have not produced a Dykes Medal winner, I have been able to produce a good percentage of flowering plants from seed the first year.

The seeds are sown in cold frames in the late fall. The frames are left open to the weather until late January or early February, after which time they are closed during cold weather. The young seedlings appear in March.

The last of April an application of commercial fertilizer is applied. The young plants are kept weeded and cultivated as frequently as possible. By the time the rush of the blooming season is over, the plants are from six to eight inches tall and are ready to be transplanted to their permanent beds. Seedlings started in open beds are only two or three inches tall at this time and are much slower in becoming established when transplanted.

This year, due to shortage of help, some plants were left in the cold frame until late September before being transplanted. By this time they had developed several fans and had to be trimmed as do old plants before transplanting. They have got off to a good start. It looks now as if they may flower even better than those transplanted earlier. We will have to wait until next May to see whether or not necessity has been the mother of another invention.

Durham, N. C.

—T. N. WEBB.

A Criticism

■ ABOUT 80 per cent of the material in the BULLETINS I have seems to be merely back-slapping and gossip for and about a certain clique.

What I want—as a person who knows no member and who has small knowledge of the mechanics of breeding iris—are pictures or line cuts of ideal branching, a standard of perfection, a list of blood lines to avoid, more articles on breeding, more iris family trees, etc., but I suppose, eventually, I'll be able to piece it all together.

—C. EDGAR BEDELL.

Schenectady, N. Y.

An Invitation from England

■ I HAVE read with much interest the copies of the BULLETINS which you have been good enough to send me. In doing so it has occurred to me that some of your members or their sons may be in this country with the American Forces and may like to see several English iris gardens. With the approach of winter this is the wrong time of the year to talk of inspecting iris, but next year I should like to arrange, if possible, for any American iris enthusiasts in this country to see something of our iris. Traveling is difficult, and gardens cannot be maintained in peacetime condition; but there should be something worth seeing in several places next May and June. If you like the idea perhaps you would kindly insert a short paragraph in your BULLETIN in January next and ask any of your members who may be interested to communicate with me. I may not be able to do much but I should be delighted to make whatever arrangements may be practicable.

—H. J. RANDALL,

Treasurer, The Iris Society

Woking, Surrey, England

September 27, 1943

REPORT OF THE REGISTRAR

■ SEE *Check List 1939* for explanations of abbreviations and BULLETIN 63: pages 78-80, October, 1936, for registration rules, one of which has been revised to read "The closing date, etc., is October 30. Any received after that date will be treated as registrations of the following year; a recess from action on requests will last from July 5 to September 5, during which time they will be ignored."

ADDITIONS TO, AND CORRECTIONS OF, LIST OF BREEDERS, ETC.

Alford. Dr. J. W. Alford, iris breeder, 1319 Bennie-Dillon Bldg., Nashville, Tenn.

Amity. Amity Gardens (W. E. Taylor), Box 43, Amity, Ore.

Auten-A.; Schroeder. Mr. Andrew Auten (deceased), breeder, and Mr. Ralph M. Schroeder, owner and registrant, Warrensburg, Ill.

Aylett. Mr. William P. Aylett, The "Mango" Apiaries and Nurseries, Mangoplah, via Wagga Wagga, N.S.W., Australia.

Barnewitz. Mr. Fred Barnewitz, 1311 Napa St., Vallejo, Calif. (breeder).

Brenan. Mr. Edward H. Brenan, 15 Clifton Court, Redlands, Calif. (iris breeder).

Buttrick. Mr. Stedman Buttrick, Buttrick Farm, Concord, Mass. (iris breeder).

Cassebeer-Nes. Mr. F. W. Cassebeer, New York 21, N. Y. (breeder), and Mrs. Thomas Nesmith, Lowell, Mass. (selector).

Creelman. Rev. Allan David Creelman, First Baptist Church, North Scituate, Mass. (iris breeder).

Debaillon. Mrs. Dan Debaillon (deceased), Lafayette, La. (plant collector).

Debaillon; Dormon. Mrs. Dan Debaillon, Lafayette, La., in whose collection of natives, natural hybrids originated, and Miss Caroline Dormon, Saline, La., to whom permission was granted to select the best and name them.

Dormon. Miss Caroline Dormon, Saline, La. (naturalist, plant collector, painter of wild flowers, author of "Wild Flowers of Louisiana, etc.").

Dormon-R. Ruth M. Dormon (Mrs. James L.), #3 Box 70, Morningsport Road, Shreveport, La. (plant collector and dealer in native plants, iris, etc.).

Fischer. Mr. David Fischer, Pearl River, La. (plant collector).

Fitzhugh-Fair. Mr. W. C. Fitzhugh, Shreveport, La., and Fairmount Gardens, Lowell, Mass. (joint introducers).

Fitzpatrick. Mrs. F. W. Fitzpatrick, 426 Whitman St., Walla Walla, Wash. (iris breeder).

Galiano. Mrs. S. A. Galiano, 8622 Spruce St., New Orleans, La. (plant collector).

Gates. Mrs. W. A. Gates, 414 N. College St., Aurora, Mo. (iris breeder).

- Hall-Harlan. Mr. C. H. Hall (deceased), Ingomar, Pa. (breeder), and Mr. James E. Harlan, 1126-30 Grant Bldg., Pittsburgh, Pa. (Vice-Pres. Fidelity and Deposit Co. of Maryland), (selector and registrant).
- Hamilton. Mr. E. L. Hamilton, Marengo, Ill. (iris breeder).
- Henry-C.G. Mrs. C. G. Henry, Melrose, La. (plant collector).
- Hoisholt. Mr. Bernard Hoisholt, Oakdale, Calif. (iris breeder).
- Kinish. Rev. David Ross Kinish, O. S. B. (1902-), St. Benedict's Abbey, Atchinson, Kansas (Catholic Priest and librarian, began breeding irises in 1937).
- Knowlton. Mr. David W. Knowlton, 32 Hancock St., Auburndale, Mass. (iris breeder).
- Kraemer. Mrs. Victorine Kraemer, Thibodaux, La. (plant collector).
- Loth. Mrs. L. W. Lothrop, 1595 Glasgow Ave., San Bernardino, Calif. (iris breeder—change of address).
- Maxwell-A. Mr. Alexander Maxwell, 601 Naches Ave., Yakima, Wash. (iris breeder).
- McClan. Mr. C. C. McClanahan, 2209 Seventh Ave., Council Bluffs, Iowa (iris breeder).
- McEwen. Margaret Robinson McEwen (Mrs. Alfred), (1869-1943), Craig Anel, South Broadway, Tarrytown-on-Hudson, N. Y. (iris breeder).
- McMillan. Mr. W. B. McMillan, Abbeville, La. (plant collector).
- Murawska. Mr. A. L. Murawska, River Drive Peony Garden, 8740 Ridge Street, River Grove, Ill. (breeder; grower of peonies, iris and other perennials).
- Nelson-E. Mr. Elias Nelson, 921 S. 19th Ave., Yakima, Wash. (has been breeding irises several years).
- Nies. Eric E. Nies, 1423 N. Kingsley Drive, Hollywood 27, Calif. (revised address).
- Norton & Maxwell. Mr. Luke Norton, Route 6, Yakima, Wash., and Mr. Alexander Maxwell, 601 Naches Ave., Yakima, Wash. (joint iris breeders).
- Norton-L. Mr. Luke Norton, Fruitvale Iris Garden (Luke and Frances), Route 6, Yakima, Wash. (iris breeders, formerly with Iris Test Gardens).
- Ramsey. Mrs. Buford Ramsey, R. R. 2, Hutchinson, Kansas (iris breeder).
- Smith-Mrs. Mrs. Smith, Maringouin, La. (plant collector).
- St. Helens. Mrs. Ida St. Helens (1875-), 1212 North 5th St., Independence, Kansas (breeder of roses, hémérocallis, irises ten years).
- Thomas-Geo. Mr. George Thomas (deceased), New Orleans, La. (formerly Supt. of Parks; plant collector).
- Wild Gard. Wild Gardens (Ruth M. Dorman, Prop.), Route 3, Box 70, Morningsport Road, Shreveport, La.
- Woodnutt. Miss Josephine J. Woodnutt, Jericho, L. I., N. Y. (iris breeder).
- Yates. Mr. J. A. Yates, Cranham, Anglefield Road, Berkhamsted, Eng. (iris breeder).

REGISTRATIONS, APPROVALS, NON-APPROVALS, INVESTIGATIONS,
CORRECTIONS AND SYNONYMS FOR 1943

- ABIDE. TB-M-B1D (Loth. N.); R., 1943; ((*mesopotamica* × -----) × (self)).
- ABSOLUTE. TB-M-S4L (Kirk-Vestal 1941); National 1943.
- ACACIAN. TB-M-R7L (Small-R.C. N.); R., 1943; (from a Sdlg. line).
- Action Frost.** National 1943; ACTION FRONT.
- ADELAIDE, TB-B1M (Aylett 1929); (LADY FOSTER × LORD OF JUNE).
- ADELAIDE CENTENNIAL. TB-S7M (Aylett 1932).
- ADORATION. TB-E-W4 (Hodson N.); R., 1943; (GLORIOLE × HAPPY DAYS); □ str. pl.
- AEGEA, Sib-La-B1D (Spender 1943); Wallace 1943; R., 1943; (EMPEROR × Sdlg.) × (*chrysographes*).
- AKRON. Sib-B1D (Auten-A.; Schroeder N.); R., 1943.
- ALADDIN'S WISH. TB-E-VLa-W1 (Murawska N.); R., 1943; (BUECHLEY GIANT × PLUE D'OR); □ str.; not a plicata, a white brushed blue.
- ALDABELLA. TB-L a - W 2 M (Tharp. N.); R., 1943; □.
- ALESSANDRO. TB-M-S4L (Woodnutt N.); R., 1943; (AMERIND × DOLLY MADISON) × (JEAN CAYEUX × AMERIND); □ sl.
- Alluwe.** Amity 1943; AL-LU-WE.
- ALTAR CANDLES. TB-E-W2L (St. Helens N.); R., 1943; (AUTUMN KING × ZUA); □ v. sw.
- AMBERJACK. TB-M-S1M (Graves N.); R., 1943; (OREGON SUNSHINE × ELSA SASS); □ none.
- AMUN RA. TB-La-Y4D (Wareham N.); R., 1943; (from Sdls. derived from *trojana* × DOMINION).
- AMY WORTH. TB-La-Y4D (Calis 1942); R., 1943; (CALIFORNIA GOLD × GOLDEN HIND); □ ro.
- AND THOU. Etc.; (Graves 1942); etc.; H. C., A. I. S. 1941; Bull. A. I. S. 82: 4. July 1941; Bull. A. I. S. 86: 15. July 1942; H. M., A. I. S. 1942; Bull. A. I. S. 89: 54. April 1943 (should not have been credited to White-C.G. Bulls. 86 and 89).
- ANNUAL MEETING. TB-M-S7M (Tharp N.); R., 1943; (BENGAL LANCER × CARDINAL); □ str.
- A R A B E S Q U E. TB-LaM-S7L (Spender 1943); Wallace 1943; R., 1943; (KING'S TREASURE × DEPUTE NOMBLLOT Sdlg.); □
- ARCADIAN EVE. TB-M-R4M (Spender N.); R., 1943; (INSPIRATION × EVENTYR) × (ROUGE DRAGON); □.
- A R C H A N G E L. TB - M - WW (Woodnutt N.); R., 1943; (PURISSIMA × MOONLIGHT) × (BRUNO × PURISSIMA); □ M.
- A. RICHARD. TB-W2L (Aylett 1929); (KASHMIR WHITE × PHYLLIS BLISS).
- AUGUSTE RENOIR. TB-M-S9L (Keller 1943); Keller 1943; R., 1943; (Sdlg. × Sdlg.); □.

- Australia. TB-S1D (Aylett 1929); (ALCAZAR × DOMINION).
- AUSTRALIAN GOLD. TB-M-Y4D (Aylett 1936); R., 1943; (Sdlg. × CALIFORNIA GOLD); □ sl.
- AUSTRALIAN SUNSET. TB-M-S4D (Aylett 1942); R., 1943; (NARANJA × COPPER LUSTRE); □ sl.
- AUTUMN COLORS. TB-LaM-S6M (Gers. N.); R., 1943; (CHRISTABEL × RUBEO (Lap.)) × (WAKARUSA); □ sl.
- AUTUMN WOODS. TB-M-S6M (Schroeder N.); R., 1943; (CHEERIO × ELKHART); □ lo.; #43-07.
- AVERY ISLAND ALBA. Vinic-WW (McIlhenny 1943).
- AVILION. TB-LaM-S1L (Spender 1943); Wallace 1943; R., 1943; (PURPLE DUSK × NEW DAWN); □ sl.
- Azamahudari. Jap-Sgl-2WD (McIlhenny 1943).
- AZURE SKIES. TB-M-B1L (Pattison 1943); Fair. 1943; R., 1943; (CRYSTAL BEAUTY × SNOWKING); □; **Summer Skies**, A. I. S. Bull. 89: 22. April 1943; H. M., A. I. S. 1943; A. I. S. Bull. 90: 4 July 1943.
- BAYOU VERMILION. Vinic-R7D (McMillan 1943); Wild Gard. 1943; R., 1943; (coll. wild McMillan 1937).
- BEA ST. HELENS. TB-E-M-R9D (St. Helens N.); R., 1943; (SEMINOLE × PINK OPAL); □ sl.
- BEAUTIFUL GALATEA. TB-M-R7L (Snyder N.); R., 1943.
- Bendigo. TB-Y9D (Aylett bef. 1940).
- BEN D'OR. TB-EM-Y4D (Spender N.); R., 1943; (JOAN LAY × CITY OF LINCOLN).
- BERNADETTE. TB-E-M-W2M (Woodnutt N.); R., 1943; (LOS ANGELES) × (B Sdlg. × W Sdlg.).
- BERT HINKLER. TB-EM-S3L (Aylett 1936); R., 1943; (MME. DURRAND × LORD OF JUNE); □ clove.
- Betergeuse.** National 1943; **BE-TELGEUSE.**
- BETSY ROSS. TB-M-B7M (Millik. N.); R., 1943; (RED DOMINION × sister of BLUE RIVER) × ((PALE MOONLIGHT × CAMELIARD) × (LADY PARAMOUNT)); #2203-6.
- BEVERLY HILLS. TB-M-R4M (Millik. N.); R., 1943; (OLD IRONSIDES × CHOSEN); #2109-2.
- BILLOWY SEA. TB-M-B1M (Norton-L. N.); R., 1943; (GREAT LAKES × SHINING WATERS); □ pl.
- BIZERTA. TB-E-M-S7L (Long-B.R. N.); R., 1943; (TREASURE SHIP × CHILDHOOD); □ M.; Selected for Trial at Wisley 1943.
- BLACK AND GOLD. TB-M-Y9D (Klein. 1943); Salb. 1943; R., 1943; ((#208 = (YAKIMA × CAMELIARD) × (YAKIMA × BURNING BRONZE)) × (#217 = ((#176A = (PURISSIMA × CAMELIARD) × (JEAN CAYEUX)) × (CROWN PRINCE))); #281.
- BLACK OPAL. TB-M-B3D (Aylett 1938); Aylett 1938; R., 1943; (GRACE STURTEVANT × CARDINAL); □ sl.
- BLACK POINT. Spur-S6D (Nies N.); R., 1943; (BRONZSPUR × Br Sdlg.).
- BLAZE OF GLORY. TB-M-R4M (Lap. N.); R., 1943; (EDWARD LAPHAM × WAKARUSA); □ str. pl.

- BLOND DEF. TB-M-Y4D (Schirmer-H. N.); R., 1943; (4th generation of Y Sdls. from LADY PARAMOUNT) × (GOLDEN BEAR).
- BLOOD CARNELIAN. TB-M-R4M (Long-B.R. N.); R., 1943; (derived from FARANDOLE, OPHELIA, ROMOLA, MELCHIOR, DOLLY MADISON, MRS. VALERIE WEST, MME. CECILE BOUSCANT and MOONLIGHT); □ M.
- Blue Beauty. Jap-Sgl-1BM (McIlhenny 1943).
- BLUE CRYSTAL. TB-E-B1L (Millik. N.); R., 1943; (from two unnamed Sdls.).
- BLUE EMPRESS. TB-E-B1D (St. Helens N.); R., 1943; (SOUV. DE MME. GAUDICHAU × -----); □ sl.
- BLUE ENCHANTRESS. TB-E-B1D (St. Helens N.); R., 1943; (SOUV. DE MME. GAUDICHAU × -----); □ sw.
- BLUE HORIZON. TB-M-La-B1M (Tharp N.); R., 1943 (PAYETTE LAKES × SIERRA BLUE).
- BLUE MAID. TB-M-B1L (Kinish N.); R., 1943; (BLUE TRIUMPH × SHINING WATERS); □ sl.
- BLUE MONDAY. TB-VLa-B1M (Webb N.); R., 1943; (THE BISHOP × PALE MOONLIGHT).
- BLUE PRINCESS. TB-MLa-B1L (Gers. N.); R., 1943; (SHINING WATERS × BLUE PRELUDE); □ sl.
- BLUE TAFFETA. TB-M-B1M (Woodnutt N.); R., 1943; (SENSATION × W Sdlg.) × (WEDGEWOOD × B Sdlg.).
- BLUE ZEPHYR. Spur-B1L (Wash. N.); R., 1943.
- Bokhara.** McIlhenny 1943; **BO-KARA.**
- BOMBAY. TB-M-Y9D (Hamilton 1943); Schreiner 1943; R., 1943; (Helios (Cay.) × DIRECTEUR PINELLE); □ none.
- BONROUGE. Vinic-R7M (Debail- lon 1942); Wild Gard. 1942; R., 1943; (coll. wild by Debaillon 1932).
- BRICK DUST. Vinic-R4M (McIlhenny 1943).
- BRIGHT PLEDGE. TB-M-Y7L (Tharp N.); R., 1943; (SUNBURST × MY CHOICE).
- BRITISH EMPIRE. TMB- (Aylett 1934); (WILLIAM MOHR × PRIDE OF WAGGA).
- BRITOMART. TB-M-Y4L (Spend- er 1943); Wallace 1943; R., 1943; (NEW DAWN × PURPLE DUSK); □ str.
- BRONYA. DB-E-R7D (Hillson N.); R., 1943; (TONY × ARENARIA); □ sl.
- BRONZED COPPER. TB-M-S4D (Klein. 1943); Salb. 1943; R., 1943; (PRINCE OF ORANGE) × (#258, Golden Brown Sdlg. = (FAR WEST × JUNALUSKA)); #316.
- BROWN BUNKER. TB-M-S4M (Tobie N.); R., 1943; (AL-LUWE × JEAN CAYEUX).
- Brown Thresher.** National 1943; **BROWN THRASHER.**
- Buckley's Giant.** Aylett 1943; **BUECHLEY GIANT.**
- BURMAH ROAD. TB-M-S4L (Hahn N.); R., 1943; (NARANJA × MARY GEDDES) × (JEAN CAYEUX × RAMESES); □ str.
- BUSTLES. TB-M-B9D (Kinish N.); R., 1943; (THEODOLINDA × NENE); □ sl.
- Butterfly.** (Keller). Keller 1943; **YELLOW BIRD.**
- BY SUNDOWN SHORES. TB-E-S7M (Jones-W.A. N.); R., 1943; (GREY DOVE × Y Sdlg. #1: (HAPPY DAYS × AMITOLA); □ sl.

- CACTIFORIUM. TMB-S3D (Aylett 1932); (ALCAZAR × LADY LILFORD).
- C A D E T. TB-M-R7D (Keller 1943); Keller 1943; R., 1943; (Sdlg. × Sdlg.).
- CADET'S DREAM. TB-M-R9L (Keller 1943); Keller 1943; R., 1943; (Sdlg. × Sdlg.); □ str. 10.
- CADUCEUS. TB-EM-B7L (Spender 1943); Wal. 1943; R., 1943; (SHAH JEHAN × prob. NEW DAWN); □.
- Cajan.** A. I. S. Bull. 91: 11. Oct. 1943; CAJAN JOYEUSE.
- CAJAN JOYEUSE. Vinic-R7L (Thomas Geo. 1942); Wild Gard. 1942; R., 1943; (coll. by Thomas Geo. near New Orleans, La., about 1935); **Cajan.**
- CAPE BON. TB-M-R4D (Tompkins N.); R., 1943; (AZTEC COPPER × VEISHEA); □ sl.
- CAPTAIN KIDD. TB-M-La-Y9M (Hahn N.); R., 1943; (ALTA CALIFORNIA × NENE) × ((HENRI RIVIERE × DEPUTE NOMBLOT) × (HAPPY DAYS)); □ str.
- CAPTAIN ROYAL. TB-M-La-B1M (Snyder N.); R., 1943; (BEOTIE) × (EL CAPITAN × DEPUTE NOMBLOT).
- CAPT. ANTHONY EDEN. TB-B3M (Aylett 1939); (MAISIE LOWE × DOMINION).
- CARDINALIS. Vinic-R4M (McMillan 1943); Wild Gard. 1943; R., 1943; (coll. by McMillan near Abbeville, La., 1937).
- CARIBBEAN TREASURE. TB-M-R4M (Stevens-W.R. N.); R., 1943; (MISS CALIFORNIA × CEDAR); #1/P69.
- CARILLON. TB-La-S4L (Wills N.); R., 1943; (MIDWEST GEM × RADIANT); □ sl.; H.C., A. I. S. 1943; A. I. S. Bull. 90: 5. Jul. 1943.
- CARMELITA. TB-E-R1L (Millik. N.); R., 1943; (blood lines: MOONLIGHT, GRACE STURTEVANT, ISHTAR and NEW ALBION); #1590-1.
- CARMENCITA. TB-E-M-R9M (Spender 1943); Wal. 1943; R., 1943; (Claret Sdlg. × INSPIRATION); □.
- CAROLINE DORMON. Vinic-R1M (Dormon-R. 1943); Wild Gard. 1943; R., 1943; (natural hybrid in garden of natives).
- CASSIBELAN. TB-E-M-B9D (Spender 1943); Wal. 1943; R., 1943; (EVOLUTION × MELCHIOR) × (DEPUTE NOMBLOT); □ sl.
- Cei-Sho-I. Jap-Sgl-3WD (McIlhenny 1943).
- Cetewago.** National 1943: CETEWAYO.
- CHANGO. TB-M-B1M (Peckham N.); R., 1943; (ENTICEMENT × ORIANA); #39-17-70; □.
- CHANTILLY. TB-M-R7L (Hall-D. N.); R., 1943; (MAIDEN BLUSH × Pink Sdlg.); □ gr.
- Chares Edward.** Bommers. 1943; CHARLES EDWARD.
- CHINA BOWL. TB-M-Y4D (Millik. N.); R., 1943; (LOUDOUN × NEW ALBION) × (HAPPY DAYS).
- CHINA LADY. TB-M-Y4L (Millik. N.); R., 1943; (sister to CHINA MAID) × (Y Sdlg.).
- CHIPPEWA. TB-M-Y8D (Salb. 1943; Salb. 1943; R., 1943; (ORLOFF) × ((SEDUCTION × COMSTOCK) × (ALTA CALIFORNIA)); □.
- CHIVALRY. TB-M-B1M (Wills N.); R., 1943; (MISSOURI × GREAT LAKES); □ M.
- *CHRYSOPRASE. Etc.; (Spender); R., 1934; etc.

- CHRYSOPTERIS. TB-E-M-Y4M (Spender 1943); Wal. 1943; R., 1943; (GOLDEN HIND × MORNING SPLENDOR) × (DEPUTE NOM-BLOT).
- Citibrice. Vinic-B7D (McIlhenny 1943).
- CITY OF SYDNEY. TB-M-W2D (Aylett 1938); (ALTA CALIFORNIA × SAN FRANCISCO).
- C. J. P. ULM. TB-S3D (Aylett 1929); (ALCAZAR × DOMINION).
- CLAREMONT. TB-M-B1D (Nies N.); R., 1943; (from a series of blues beginning with SOUV. DE MME. GAUDICHAU × Blue Sdlg.); □sl.
- COL. KEITH COMPTON. TB-M-B1L (Keller 1943); Keller 1943; R., 1943; (Sdlg. × Sdlg.).
- CONCÉRTO. TB-M-R9D (Tompkins N.); R., 1943; (IOWA GLORY × OSSAR) × (DEPUTE NOMBLOT); □sl. gr.
- CONJÉ DAY. TB-M-S7M (Keller 1943); Keller 1943; R., 1943; (Sdlg. × Sdlg.).
- CONNOQUENESSING. TB-M-S7L (Pillow 1943); Kellogg 1943; R., 1943; (PURISSIMA × JELLOWAY); name means "not a long way straight."
- CONTRAST. Vinic-B9M (Debaillon 1943); Wild Gard. 1943; R., 1943; (coll. in wild by Debaillon).
- COOL HARBOR. TB-M-Y1L (Smith-K. N.); R., 1943; (CAROLINE BURR × MOON MIST).
- COPPERMINE. TB-M-R4M (Tobie N.); R., 1943; (AUBANEL × EROS).
- COPPER RIVER. TB-M-La-S4M (De Forest N.); R., 1943; (E. B. WILLIAMSON × FORTUNE); □.
- CORAL MELODIES. TB-E-M-S7M (Tharp N.); R., 1943; (MY CHOICE × LYNDON); □ v. sw.
- CORNISH COMBER. TB-M-W7 (Spender 1943); Wal. 1943; R., 1943; (NEW DAWN × PURPLE DUSK); □.
- CREAM TART. DB-E-Y9M (Hillson N.); R., 1943; (Hill Sdlg. × ARENARIA); □ sp.
- CROWNED PRINCESS. TB-M-La-W6M (Nies N.); R., 1943; (SHINING WATERS × SOUV. DE MME. GAUDICHAU) × (Y Sdlg.).
- CUCHULLAIN. TB-LaM-R6M (Spender 1943); Wal. 1943; R., 1943; (((GOLDEN HIND × EVOLUTION) × (MELCHIOR)) × ((MRS. VALERIE WEST × DEPUTE NOM-BLOT))) × (MORNING HERO).
- DAFFY. TB-M-La-Y8D (De Forest N.); R., 1943; (ADELANTO × TIFFANY); □ sl.
- Daisy of Stapleton.** A. I. S. Bull. 85: 27. Apr. 1942; DAISY STAPLETON.
- DAISY STAPLETON. TB-M-Y4D (Aylett 1942); Aylett 1942; R., 1943; (ALTA CALIFORNIA × CALIFORNIA GOLD); □; **Daisy of Stapleton.**
- DAN DEBAILLON. Vinic-R4L (Dormon 1943); Wild Gard. 1943; R., 1943; (natural hybrid amongst natives); **Dan Deballion.**
- Dan Deballion.** A. I. S. Bull. 91: 11. Oct. 1943; DAN DEBAILLON.
- DANNY. TB-EM-Y9D (Kinish N.); R., 1943; (HENRI RIVIERE × SHIRVAN); □ sl.
- DAUGHTER KATRINA. TB-M-Y4M (Nies N.); R., 1943; (CATERINA × EASTER MORN) × (Y Sdlg.); □ M.
- DAVID FISCHER. Vinic-B7M (Fischer N.); R., 1943; (Coll. wild vicinity of New Orleans, La., by Fischer 1935).

DAWNING LIGHT. TB-M-La-R4L (Wareham N.); R., 1943; (from Sdlgs. derived from *trojana* and DOMINION).

DEBUTANTE. IB-E-R3L (St. Helens N.); R., 1943; (SEMINOLE × GOLD IMPERIAL); □ none.

DECORUS. TB-E-S7L (Taylor-C.C. N.); R., 1943; (HAPPY DAYS × MEHAMA) × (MAUNA LOA).

DELILAH. TB-M-R7L (Tompkins N.); R., 1943; (Sass 30-109 × PINK SATIN) × (ELIZABETH EGELBERG); □ sl.

DEPARTING SUN. TB-M-La-Y9M (Hahn N.); R., 1943; (ALTA CALIFORNIA × NENE) × ((HENRI RIVIERE × DEPUTE NOMBLOT) × (HAPPY DAYS)); □ str.

DERBY. TB-EM-Y4D (Ohl N.); R., 1943; (AMITOLA × HAPPY DAYS).

DESERT CHIEF. TB-M-La-Y9M (Hahn N.); R., 1943; (ALTA CALIFORNIA × NENE) × ((HENRI RIVIERE × DEPUTE NOMBLOT) × (HAPPY DAYS)); □ str.

DESERT STAR. TB-M-La-Y4L (Tharp. N.); R., 1943; (DUCHESS OF MAIN STREET × HAPPY DAYS); □ sw.

DESERT VICTORY. TB-La-Y9M (Ketchum N.); R., 1943; □ sl.

DIVIDEND. TB-VLa-Y4D (Douglas-G. N.); R., 1943; (SUNDANCE × GLEN ELLEN); □.

DIXIE SUNSHINE. TB-M-Y4D (Millik. N.); R., 1943; (Y Sdlg. #1836-2 × sister of FORT KNOX).

Dolly Maddison. Aylett 1943; DOLLY MADISON.

DOLLY WALKER. TB-M-Y4D (Aylett 1942); Aylett 1942; R., 1943; (NARANJA × HAPPY DAYS); □ sl.

DON BRADMAN. TB-La-B1D (Aylett 1930); (DOMINION × PRIDE OF WAGGA).

DOROTHEA LOADER. TMB-M-B1L (Aylett N.); R., 1943; (PURISSIMA × GRACE MOHR); □ sl.

DRAGONS BLOOD. TB-La-R9D (Clevenger N.); R., 1943; (DAUNTLESS × LR Sdlg.); □ none.

DREAMCASTLE. TB-M-R7L (Cook N.); R., 1943.

DREAMLAND. TB-E-R7M (Snyder N.); R., 1943; (*trojana* × PIONEER) × (RICARDI × MOA).

DRESS PARADE. TB-MLa-Y9M (Maxwell-A. N.); R., 1943; (NARANJA × PRAIRIE SUNSET); □.

DUBARRY ROSE. TB-EM-R4M (Gers. N.); R., 1943; (GOLDEN LIGHT) × (MIDGARD × LIEBSCHEN); □ sl. fruity.

Dupate Nomblot. Aylett 1943; DEPUTE NOMBLOT.

DYAK. TB-M-B1M (Peckham N.); R., 1943; (Kirk. B Sdlg. × Kirk. B Sdlg.) × (PARTHENON); #40-9-43; □.

EASTER BONNET. TB-La-S7M (Norton & Maxwell N.); R., 1943; (MOROCCO ROSE × ALASTOR); □.

EBONY ISLE. TB-La-R3D (De Forest N.); R., 1943; (THE RED DOUGLAS) × (RUBEO × ALTA CALIFORNIA); □ sl.

EDMONDSON V. C. TB-M-Y7M (Aylett 1942); Aylett 1942; R., 1943; (MRS. VALERIE WEST × MIRASOL); □ sl.

E. E. COLLINS. TB-M-W2M (Aylett 1931); (SAN FRANCISCO × Plie. Sdlg.).

E. E. SHEA. TB-W6M rev (Aylett 1931).

ELENA CHOOSING. TMB-EM-S4M (White-C.G. N.); R., 1943; (ANSWER × JOCUND); □.

ELUSIVE. TB-M-S7L (Millik. N.); R., 1943; (from two Sdlgs.).

EMILY PYKE. TMB-B1L (Aylett 1933); (KASHMIR WHITE × LADY LILFORD).

EPHIGENIE. Jap-Dbl-2RL (McIlhenny 1943).

ERIC THE RED. Sib-MLa-R7D (Whitney N.); R., 1943; (HELEN ASTOR × Sdlg.); H.C., A. I. S. 1943; A. I. S. Bull. 90: 5. July 1943.

Ethel Packham. Aylett 1943; **ETHEL PECKHAM.**

EVE HOWARD. TB-M-W1 (Small - R.C. N.); R., 1943; (MOTHER OF PEARL × W Sdlg.).

EVELEEN STINTON. TB-MLa-Y9M (Aylett 1938); (MRS. VALERIE WEST × MIRASOL).

EVENING SERENADE. TB-M-S4L (Hahn N.); R., 1943; (NARANJA × MARY GEDDES) × (JEAN CAYEUX × RAMESES); □ str.

EVENING SKIES. TB-EM-R6L (Gers. N.); R., 1943; (((SPRING MAID) × (RAMESES × EROS)) Lap.) × (WAKARUSA); □ lo.

EXTRA VAGANZA. TB-VLa-W9D (Doublas-G. N.); R., 1943; (ADIOS × CORTEZ); #42-V2; □.

Fairhaven. TB (Buttrick); A. I. S. Bull. 87: 56. Oct. 1942; Mr. Buttrick not yet ready to register.

FIOR DEL MONDO. DB-E-Y9M (Hillson N.); R., 1943; (Hill Sdlg. × YELLOW FRILLS); □ M.

FLAMING MAPLE. Vinie-R4D (Debaillon; Dormon N.); R., 1943; (natural hybrid among Debaillon's collected forms in 1941).

FLORA KLAHOLT. TB-EM-La-R9M (Kinish N.); R., 1943; (APHRODITE × CLARA NOYES); □ sl.

Flora Lenor. De Forest 1943; **FLORA ZENOR.**

Florence Barriquad. National 1943; **FLORENCE BARRIQUAND.**

FLUTED A R R O W. TB-M-La-W8L (Tharp N.); R., 1943; ((ZASU × SUSAN BLISS) × (MIDWEST)) × (CHRISTINE GRAY); □ str.

FORGET ME NOT. Hex-M-B1M (Nies N.); R., 1943; (parentage lost).

Francella. A. I. S. Bull. 89; 44. April 1943; **FRANCELIA.**

FRANK PUGLIESE. TB-M-R4D (Lap. N.); R., 1943; (CHRISTABEL × RED GLEAM); □ M.

FROSTY MOON. TB-MLa-W1 (Maxwell-A. N.); R., 1943; (MING YELLOW × PRAIRIE SUNSET); □.

FULL MOON. TB-M-W6L (Grant N.); R., 1943; (#38-83 × #40-26); □; #43-2.

GABRIEL'S RADIANCE. TB-E-WW (Tharp N.); R., 1943; (EL CAPITAN × WAMBLISKA) × (GUDRUN).

G A I E T Y. TB-M-S7M (Covert N.); R., 1943; (MRS. WILLARD JAKUES × CARLOTTA); □ sl.

GAMINE. IB-M-S7L (Peckham N.); R., 1943; (CYRUS THE GREAT × Sdlg.); #40-22-51; Tab I.; □.

GARNET AND COPPER. IB-S6D (Aylett 1931); (RIALGAR × ROMANCE).

GENERAL EISENHOWER. TB-M-R3M (Ramsey N.); R., 1943; (JULIA MARLOWE × NENE).

- GENERAL SIR THOMAS BLAMEY. TB-M-R4D (Aylett 1942); Aylett 1942; R., 1943; (GRACE STURTEVANT $\times$ MRS. VALERIE WEST); **Winston Churchill** (Aylett); $\square$ sl.
- Gentian Violet. TB (Hanes); A. I. S. Bull. 89: 26. April 1943; not ready for registration.
- G. ERREY. TB-S7M (Aylett 1930); (WYOMING $\times$ YELLOW MOON).
- Gigantea Alba.** McIlhenny 1943; GIGANTICAERULEA ALBA.
- Gigantea Albipetala Lanciolata. Vinie-WW McIlhenny 1943.
- Gigantea Rubra.** McIlhenny 1943; GIGANTICAERULEA ROYAL.
- Gipsy Baron.** A. I. S. Bull. 91: 57. Oct. 1943; GYPSY BARON.
- GLITTERS. TB-M-S7L (Kirk-Vestal 1941); National 1943.
- GLORY. TB-M-Y4L (Kinish N.); R., 1943; (SHINING WATERS $\times$ GUDRUN); $\square$ sl.
- GOLD BONANZA. TB-M-Y4D (Tobie N.); R., 1943; (GOLDEN HIND $\times$ TRIPTYCH).
- GOLD DRAPE. TB-M-Y4M (Cahoon N.); R., 1943; (Sass Sdlg. $\times$ Y Sdlg. derived from HAPPY DAYS $\times$ W. R. DYKES); $\square$ M.
- GOLDEN ECHO. TB-M-W6D rev (Ketchum N.); R., 1943; $\square$.
- Golden Fluke.** Aylett 1943; GOLD FLAKE.
- GOLDEN GIRL. TB-M-Y4D (Small-R.C. N.); R., 1943; (from a Y Sdlg. $\times$ Y Sdlg.).
- Golden Magic.** Keller 1943; MAGIC GOLD.
- GOLDEN SPANGLE. TB-EM-Y7D (Cassebeer-Nes. N.); R., 1943; (EVOLUTION $\times$ HAPPY DAYS). H.C., A. I. S. 1943; A. I. S. Bull. 90: 5. July 1943.
- GOLDEN SYMPHONY. TB-VLa-Y9L (Horton N.); R., 1943; (PLURABELLE $\times$ RAMESES).
- Golden Touch.** Keller 1943; MAGIC TOUCH.
- GOLD MORNING. TB-LaM-Y6D (Gers. N.); R., 1943; (CHRISTABEL $\times$ RUBEO (Lap.)) $\times$ (WAKARUSA).
- GOOD SON. TB-M-S9D (Taylor-C.C. N.); R., 1943; (GOOD SIR $\times$ -----).
- GRACE EADIE. IB-M-W4 (Taylor-C.C. N.); R., 1943; (PURISSIMA $\times$ MEHAMA) $\times$ (HAPPY DAYS).
- GRACE McDADE. TB-La-R4L (McDade N.); R., 1943; $\square$.
- GRADUATION NIGHT. TB-E-M-WW (Tharp N.); R., 1943; (DUCHESS OF MAIN STREET $\times$ HAPPY DAYS); $\square$ str.
- GRANADOS. TB-M-S6M (Spendler 1943); Wal. 1943; R., 1943; (DÉPUTÉ N O M B L O T Sdlg. $\times$ GOLDEN HIND Sdlg.); $\square$ sl.
- Graton.** Bommers. 1943; GRATONE.
- Gray Daze. TB (Alford N.); A. I. S. Bull. 87: 18. Oct. 1942.
- GRETNA. Vinie-B1M (Debaillon 1942); Wild Gard. 1942; R., 1943; (coll. wild vicinity New Orleans, La., 1937, by Debaillon).
- Gudrima.** Aylett 1943; GUDRUN.
- GUINARD. TB-EM-R7D (Snyder N.); R., 1943; (RUBEO) $\times$ (MELCHIOR $\times$ TENEBRAE); **Sparkling Burgundy** (Snyder).
- Guldensynedtiano.** National 1943; HALOPHILA.
- GULF SUNSHINE. Vinie-Y4D (Galiano 1943); Wild Gard. 1943; R., 1943; (coll. wild in La. 1935 by Galiano).
- Gunmetal. TB (Brehm N.); A. I. S. Bull. 87: 18. Oct. 1942.

G Y P S Y KING. TMB-M-S7D (Loth. N.); R., 1943; (Sdlg. × FARCROSS).

HAILE SELASSIE. Vinie-B1D (McMillan 1943); Wild Gard. 1943; R., 1943; (coll. wild in 1937 by McMillan).

HALLOWE'EN NIGHT. TB-La-Y4M (National 1943); National 1943; R., 1943.

HAPPY ISLES. TB-EM-B1L (Essig N.); R., 1943; (same parentage as ALEUT); □ sl.

HARVEST BLUSH. TB-La-Y9L (Mur. N.); R., 1943; (ROYAL SCEPTRE × BEAU SABREUR); □ str.

Hazel Gallagher. National 1943; HAZEL GALLAGHER.

HELEN MARTIN. TB-M-W2L (Aylett 1942); Aylett 1942; R., 1943; (SAN FRANCISCO × ALTA CALIFORNIA); □ sl.

HELEN MCGREGOR. TB-M-B1M (Graves N.); R., 1943; (PURISIMA × CLOUD CASTLE); H. C., A. I. S. 1943; A. I. S. Bull. 90: 5. July 1943.

HELICON. Sib-LaM-B1D (Spender 1943); Wal. 1943; R., 1934; (*chrysographes* Sdlg. × EMPEROR Sdlg.); data completed.

HELIODORE. Sib-LaM-B1M (Spender 1943); Wal. 1943; R., 1943; (Sdlg. × EMPEROR Sdlg.).

HIJA MIA. TB-M-Y4M (Taylor-C.C. N.); R., 1943; (ANN SHERIDAN × MARGARET BOND); pronounced E'hah Me'ah (my daughter).

HINDU QUEEN. TB-M-La-S6M (Wills N.); R., 1943; (REMESES × JEAN CAYEUX) × (CONESTOGA (Kirk.)); □ none.

Hinode Dzuru. McIlhenny 1943; HINUDEDZURU.

HOMACHITTO. Vinie-R7D (Debaillon 1942); Wild Gard. 1942; R., 1943; (coll. vicinity New Orleans, La., about 1934 by Debaillon).

HOMAHOULA. Vinie-R7D (McMillan N.); R., 1943; Choctaw meaning "beloved red"; (coll. from bog near Abbeville, La., 1937 by McMillan).

HONEYFLOW. TB-M-S4M (Tompkins N.); R., 1943; (AZTEC COPPER × VEISHEA); □ sl.

HONEYRUST. TB-M-S6D (McClan. N.); R., 1943; (RADIANT × E. B. WILLIAMSON); □ none.

HOOSIER BANTAM. TB-EM-R4M (Gers. N.); R., 1943; (GOLDEN LIGHT) × (MIDGARD × LIEBSCHEN); □ sl.

HORA. TB-M-R7M (Peckham N.); R., 1943; (KUBLAI KHAN × Sdlg.); #38-20-1; □ sl.

HORNET. TB-M-La-W4 (Peckham N.); R., 1943; #38-24-5; □ sl. sw.

IANTHIS. Sib-LaM-B1M (Spender 1943); Wal. 1943; R., 1943; (EMPEROR Sdlg. × Sdlg.).

ICELANDIA. TB-M-WW (Tobie N.); R., 1943; (PALE MOONLIGHT × ALTA CALIFORNIA).

Ida Anavolary. Hahn 1943; IDA ANVALARY.

IDA MILLET. TB-EM-WW (Carp. C. N.); R., 1943; (GUDRUN × BLUE MONARCH).

Ikeena. A. I. S. Bull. 91: 20. Oct. 1943; SKEENA.

ILLUSION. TMB-La-B1L (Klein. 1943); Cooley 1943; R., 1943; (ORMOHR × RED CROSS); □.

IMPERIAL POMP. TB-M-R1D
(Schirmer-H. N.); R., 1943;
(VALOR × ASHES OF ROSES);
#42-43.

INDIANA ROSE. TB-M-R7M
(Horton N.); R., 1943; (AZTEC
GLORY × RIDING HIGH).

INDIANOLA. TB-M-R4D (Horton
N.); R., 1943; (B-64 × RED
BONNET).

INDIAN QUEEN. TB-La-R6D
(Keller 1943); Keller 1943; R.,
1943; (Sdlg. × Sdlg.); **Indian
Summer** (Keller).

Indian Summer. (Keller 1943);
INDIAN QUEEN.

INTERMEZZO. Etc.; (Tompkins
N.); etc.; (GLORIOLE × SHINING
WATERS) × (FAR WEST); etc.

IOLITE. TB-M-B1D (Loth. N.);
R., 1943; (L10-40 × BLUE
DUSK).

JACINTH. TB-M-Y4M (Spender
1943); Wal. 1943; R., 1943;
(GOLDEN HIND × DEPUTE NOM-
BLOT Sdlg.) × (sister Sdlg.).

JACK HOBBS. IB-R9M (Aylett
bef. 1940).

JAKE. TB-La-WW (Sass-J. 1943);
Long-J.D. 1943; R., 1943; (TIF-
FANY × MAID OF ASTOLAT); □ sl.

JAMIE. TB- (Pat. N.); A. I. S.
Bull. 89: 27. April 1943; (ECLA-
DOR × -----); not to be sold.

JANICE. TB-M-B1M (Schreiner-
R. 1943); Schreiner 1943; R.,
1943; (SENSATION × ZULU); □
none.

*JASMINE. TB; etc. (Nes. N.); etc.

JASMINE. TB-EM-La-Y4D (Grant
N.); R., 1943; (SUNDAY BEST ×
RADIANT); □ sl.; #43-1.

JEAN BATTEN. TB-R1M (Aylett
1936); (LORD OF JUNE × PRIDE
OF WAGGA).

JEAN HUGHES. TB-M-S4M
(Tharp N.); R., 1943; (MIST
o' ROSE × JEAN CAYEUX); □
sp. ho.

JESSIE BRICE. TB-EM-Y4M
(Covert N.); R., 1943; (DUART
× MISS ARAVILLA); □ sl.

JEUNE FILLE. Vinie-WW (De-
baillon 1942); Wild Gard. 1942;
R., 1943; (coll. wild, vicinity New
Orleans, La. in 1934 by Debail-
lon).

JIMMY MELROSE. TB-S9D (Ay-
lett 1936); (VESPER GOLD ×
TALISMAN).

JOSEVEIVE. TB-M-S9D (Taylor-
C.C. N.); R., 1943; (INDIAN
CHIEF × MAUNA LOA) × (GOOD
SIR).

JULLE ANN. TB-La-B1L (Callis
N.); R., 1943; (MISSOURI NIGHT
× PALE MOONLIGHT); □ lemon.

JULY BEAUTY. TB-VLa-B1L
(National 1943); National 1943;
R., 1943; □ Str.

JUNE EVE. TB-M-S4L (Hahn
N.); R., 1943; (NARANJA × MARY
GEDDES) × (JEAN CAYEUX ×
RAMESES); □ str.

KABLOONA. TB-M-W5M (Tobie
N.); R., 1943; (JUNALUSKA ×
MERCEDITA) × (TRIPTYCH).

KATHARINE FAY. TB-M-WW
(Fay N.); R., 1943; (GLORIOLE
× W Sdlg. 39-3); No. 41-31;
H. C., A. I. S. 1943; **Katherine
Fay**, A. I. S. Bull. 90: 5. July
1943 and A. I. S. Bull. 91: 49.
Oct. 1943.

KATHERINE DYKES. TB-M-
B1M (Yates 1943); Orp. 1943;
R., 1943; (SAPPHIRE × ———);
□ sl.

- Katherine Fay.** A. I. S. Bull. 90: 5. July 1943; A. I. S. Bull. 91: 49. Oct. 1943; KATHARINE FAY.
- KATHERINE MURPHY. TB-Y6M (Aylett 1932); (SHOT SILK × Sdlg.).
- KATY. TB-E-La-Y1L (Smith-K. N.); R., 1943; (KALINGA × JELLOWAY); No. K-11.
- KAYLORE. TB-M-S7M (Small-R.C. N.); R., 1943; (from a Sdlg. line).
- K. D. PARMENTEUR. TB-B7D (Aylett 1931); (DOMINION × ALCAZAR).
- KENTUCKY BEAUTY. TB-M-R9M (Carp.-C. 1943); Fair. 1943; R., 1943; (CORAL × RAMESES).
- KENTUCKY SUNSHINE. TB-M-Y4D (Carp.-C. 1943); Fair. 1943; R., 1943; (BURNING BRONZE × W. R. DYKES).
- KING RUSSET. TB-M-S6D (Stevens-W.R. N.); R., 1943; (SUNTAN × NEW DAWN); No. 1/08.
- KIRKMO. TB-MLa-R7D (Clevenger N.); R., 1943; (GUDRUN × LR Sdlg.); □ none.
- KOSCIUSKO. TB-M-Y4M (Tobie N.); R., 1943; (TRIPTYCH × MAYAGUEZ).
- KRAEMER TAN. Vinie-Y4L (Kraemer 1943); Fitzhugh-Fair. 1943; R., 1943; (coll. wild by Kraemer).
- KRAEMER YELLOW. Vinie-Y1L (Kraemer 1943); Wild Gard. 1943; Fair. 1943; R., 1943; (coll. wild in 1933 by Kraemer).
- LA BLANCHEFLEUR. Sib-E-M-WW (Spender 1943); Wal. 1943; R., 1943; (*orientalis* Sdlg. × SNOW QUEEN); **Blanchefleur** (Spender 1943); Wal. 1943.
- LA CAÑADA. TB-M-Y4D (Millik. N.); R., 1943; (sister to FORT KNOX).
- LADY LOVE. TB-M-R4L (Douglas-G. N.); R., 1943; (TITIAN LADY × MELITZA); □.
- LADY MARGARET. TB-M-R4L (Small-R.C. N.); R., 1943; (from a Sdlg. line).
- LADY MOHR. TMB-E-W3D (Salb. N.); R., 1943; (((ALTA CALIFORNIA × KING MIDAS) × (MISS CALIFORNIA)) × (WILLIAM MOHR)) × (IB-MAC).
- LADY REDDINGTON. TB-LaM-R4D (Small-R.C. N.); R., 1943; (BURNING BRONZE × DAZZLER).
- LA GLORIA. TB-M-Y6 (Brehm bef. 1943); National 1943.
- LAKE GEORGE. TB-MLa-B1M (Smith-K. N.); R., 1943; (prob. from MME. ULMANN); #2-27.
- LATE YELLOW. TB-VLa-Y3L (Keller 1943); Keller 1943; R., 1943; (Sdlg. × Sdlg.); □.
- LAVENDER LADY. TB-M-La-B1L (Woodnutt N.); R., 1943; ((EL CAPITAN × DOLLY MADISON) × (PAULETTE × EL CAPITAN)) × (W Sdlg.); □ sl.
- LIDICE. TB-MLa-R7D (Tompkins N.); R., 1943; (THE RED DOUGLAS × WINNESHIEK); □ none.
- LIGHTNING. TB-M-R4M (Hahn N.); R., 1943; (JUNALUSKA × JERRY) × (WAR EAGLE × Sass 30-40); □ pl.
- LIGHTS ON. TB-E-R4D (Lap. N.); R., 1943; (CHRISTABEL × RED GLEAM) × ((RED SAILS × JERRY) × (RED GLEAM)); □ M.
- LILLIAN TRICHEL. Vinie-S7L (Dormon 1943); Wild Gard. 1943; R., 1943; (Natural hybrid in garden of natives 1934).

- LITTLE BLACK SAMBO. DB-M-B1D (Millik. N.); R., 1943; (AURELLE × GRACE STURTEVANT).
- LITTLE ROCK. TB-M-R9M (Kirk.-Vestal 1942); National 1943; □.
- LOUISIANA DAWN. Vinic-S9L (Dormon 1943); Wild Gard. 1943; R., 1943; (natural hybrid in garden of natives 1934).
- LOVELY LASS. TB-M-R4L (Small-R.C. N.); R., 1943; (from a Sdlg. line).
- LOVELY ROSE. TB-M-R7M (Horton N.); R., 1943; (MATTERHORN × LYNDON).
- LULWORTH COVE. TB-M-W1 (Spender 1943); Wal. 1943; R., 1943; (NEW DAWN × PURPLE DUSK); □.
- Lydia. TB-Y2L (Aylett 1934); (CYDALISE × KING KARL).
- MAGIC GOLD. TB-M-Y9L & R7D (Keller 1943); Keller 1943; R., 1943; (Sdlg. × Sdlg.); blooms both colors each stalk; **Golden Magic** (Keller).
- MAGIC TOUCH. TB-M-Y1L (Keller 1943); Keller 1943; R., 1943; (Sdlg. × Sdlg.); **Golden Touch** (Keller); □.
- MAGNOLIA PETAL. Vinic-Y4L (Debaillon 1942); Wild Gard. 1942; R., 1943; (coll. vicinity New Orleans, La., about 1935 by Debaillon).
- MAIDEN BLUSH. TB-M-R4L (Hall-D 1943); Hall-D. 1943; R., 1943; (Pink Blend Sdlg. × MAY DAY); □ apple; No. 40-07.
- MAIVEROE. TB-M-W7 (Spender 1943); Wal. 1943; R., 1943; (NEW DAWN × PURPLE DUSK); □ sl.
- Mandelay. A. I. S. Bull. 88: 48. Jan. 1943; MANDALAY (Hall-D.).
- MARBLEHEAD. TB - VLa - B7D (Callis 1942); R., 1943; (WILL ROGERS × JOSEPH ROBIDOUX); □ gr. hya.
- Mareschel Ney. Aylett 1943; MARESCHAL NEY.
- MARETH. TB-M-B1M (Long-B.R. N.); R., 1943; ((MRS. VALERIE WEST) × (MOONLIGHT × MME. CECILE BOUSCANT)) × (RAMESES); Selected for Trial at Wisley 1943.
- Margaret. Jap-Dbl-2BM (McIlheny 1943).
- MARGDALE. TB-M-Y9D (Johnson N.); R., 1943; (KING MIDAS × -----); □ sl.
- MARIMBA. TB-M-S4L (De Forest N.); R., 1943; (SALAR × FAR WEST); #15-40.
- MARINGOUIN FULVA. Fulv-EM-Y4D (Smith - Mrs. 1943); Fitzhugh-Fair. 1943; R., 1943; (coll. wild at Maringouin, La., by Smith-Mrs.); **Yellow Fulva**.
- MARLBOROUGH. TB - M - S9D (Stevens-W.R. N.); R., 1943; (DARK KNIGHT × INSPIRATION); #8/N3.
- MARTHA MINERVA. IB-M-R9M (Gates N.); R., 1943; (MIDGARD × DR. CHAS. H. MAYO).
- MARY CLOTILDE. TB-M-B1L (Kinish N.); R., 1943; (BLUE TRIUMPH × SHINING WATERS); □.
- Mary Geddis. Amity 1943; MARY GEDDES.
- MARY OSMUN. TB-M-R1L (Jones-W.A. N.); R., 1943; (BLUE MONARCH × plicata Sdlg. of SAN FRANCISCO type); □ str.

- MARY S. DEBAILLON. Vinic-R3D (Dormon 1942); Wild Gard. 1942; R., 1943; (coll. wild by Dormon); **Mary S. DeBallion**.
- Mary S. DeBallion**. A. I. S. Bull. 91: 12. Oct. 1943; MARY S. DEBAILLON.
- MASTER CHARLES. TB-M-R1D (Wmsn. N.); R., 1943; (BB2932 $\times$ -----); #2019; $\square$.
- MATTINS. TB-M-La-R6L (Wareham N.); R., 1943; (from Sdlgs. derived from *trojana* and DOMINION); $\square$.
- MAUVE BEAUTY. Jap-Sgl-3BM (McIlhenny 1943).
- MAUVEMIST. DB-E-B9M (Hillson N.); R., 1943; (from Hill Sdlgs.); $\square$ fr.
- MAX ARNDT. TB-W8M (Aylett 1934); (CYDALISE $\times$ KING KARL).
- MAYAN MAGIC. TB-M-Y9M (Tompkins N.); R., 1943; (CHEERIO $\times$ OSSAR) $\times$ (NARANJA); $\square$ jas.
- MAYBELLE. TB-E-S4D (Bommers. 1943); Bommers. 1943.
- MAYOR NEALE. TB-M-R7D (Lap. N.); 1943; (RED POMP $\times$ ANGELUS); $\square$ sp.
- MAYOR OF WAGGA. TB-R3M. (Aylett 1931); (DOMINION $\times$ MRS. VALERIE WEST).
- MAY QUEEN. TB-M-B1L (Kinish N.); R., 1943; (BLUE TRIUMPH $\times$ SHINING WATERS); $\square$.
- MEI LING. Vinic-Y4D (McMillan N.); R., 1943; (Coll. wild near Abbeville, La., by McMillan).
- Melbourne. TB-B7D (Aylett 1929); (R Sdlg. $\times$ DOMINION).
- MELBOURNE CENTENNIAL. TB-B7D (Aylett 1930); (DOMINION $\times$ MRS. VALERIE WEST).
- MELLEAGER. TB-E-M-R4M (Spender N.); R., 1943; (INSPIRATION $\times$ EVENTYR) $\times$ (sister Sdlg.); $\square$.
- MEXICO. TB-La-S9M (Klein. 1943); Cooley 1943; R., 1943; (Y Sdlg. #245 $\times$ Y Sdlg. #255); $\square$.
- Michealangelo**. Hahn 1943; MICHELANGELO.
- MIDWAY. TB-E-R3D (Barnewitz N.); R., 1943 (MME. CHERI $\times$ BRUNO); $\square$ sp.
- Minnie Colquit**. National 1943; MINNIE COLQUITT.
- MISS AMERICA. TB-M-W4 (Covert N.); R., 1943; (SNOWKING $\times$ W Sdlg.); $\square$ sl.
- Miss Arvilla**. A. I. S. Bull. 88: 61. Jan. 1943; MISS ARAVILLA.
- MISS AUSTRALIA. TB-La-Y9D (Aylett 1938); Aylett 1938; R., 1943; (IRIS KING $\times$ PRIDE OF WAGGA); $\square$ none.
- MISS GRENADA. TB-M-S7M (Ketchum N.); R., 1943; $\square$ sl.
- MISS SALLY. TB-E-La-S7M (Salb. N.); R., 1943; (MISS CALIFORNIA $\times$ CALIFORNIA GOLD).
- MIST O'PINK. DB-E-R9L (Hillson N.); R., 1943; (ROSEMIST $\times$ ARENARIA); $\square$ sl.
- MISTY GOLD. TB-M-Y5M (Schreiner-R. 1943); Schreiner 1943; R., 1943; (TIFFANY $\times$ SIEGFRIED); $\square$ none.
- MISTY ROSE. TB-M-R6M (Mit. 1943); Salb. 1943; R., 1943; (SEDUCTION $\times$ Sdlg.).
- MME. MAYLING. TB-EM-M-W4 (Grant N.); R., 1943; (SUNDAY BEST $\times$ CHOSEN); #43-8; $\square$.
- MONSTER. TB-R7M (Aylett 1930); (Sdlg. $\times$ ALCAZAR).
- MOROCCO RED. TB-M-R4M (Hahn N.); R., 1943; (JUNALUSKA $\times$ JERRY) $\times$ (WAR EAGLE $\times$ Sass 30-40); $\square$ pl.
- MOTTLED CREAM. TB-M-Y1M (Aylett 1939); (MRS. VALERIE WEST $\times$ HAPPY DAYS).

MRS. CAMMIE HENRY. Vinie-R7M (Henry-C.A. 1942); Wild Gard. 1942; R., 1943; (natural hybrid in collection of natives, Henry-C.A.).

Mrs. J. A. Hayden. Jap-Dbl-3WM (McIlhenny 1943).

MRS. JOAN TOM. TB-M-R1M (Aylett 1942); R., 1943; (MRS. VALERIE WEST $\times$ HAPPY DAYS); $\square$ sl.; **Mrs. Joan Tomb.**

Mrs. Joan Tomb. A. I. S. Bull. 85: 27. April 1942; Aylett 1943; MRS. JOAN TOM.

MRS. P. PALMER. TB-W9D rev (Aylett 1936); (ASIA $\times$ Sdlg.).

MT. KOSCIUSKO. TMB-E-WW (Aylett 1933); (KASHMIR WHITE $\times$ ZWANENBURG).

NAMESAKE. TB-M-Y4D (Aylett 1937); (ALTA CALIFORNIA $\times$ PLUIE D'OR).

NANCY HARDISON. TB-M-R4L (Douglas-G. N.); R., 1943; ((FRANCESCA $\times$ Y Sdlg.) $\times$ (RADIANT)) $\times$ (GAY TROUBADOUR); $\square$.

Nancy Orm. Aylett 1943; **NANCY ORNE.**

NAOMI CREELMAN. TB-M-R3D (Creelman N.); R., 1943; (GRACE STURTEVANT $\times$ ANDREW JACKSON); $\square$ sl.

NATALIE. TB-VLa-W7 (Callis 1942); Callis 1942; R., 1943; (ST. JOSEPH $\times$ CLINTON SYLVESTER); $\square$ str. lil.

Ned Le Fever. De Forest 1943; **NED LEFEVRE.**

NEW ORLEANS. Vinie-S7L (Debaillon 1942); Wild Gard. 1942; R., 1943; (coll. wild vicinity New Orleans, La., 1936 by Debaillon).

NORINE. TB-M-S7L (Kirk. 1941); National 1943.

OCEAN WAVES. TB-M-B1M (Hodson N.); R., 1943; (MISSOURI $\times$ MRS. VALERIE WEST); $\square$ str. pl.

Ochracea Coerules. Aylett 1943; **OCHRACEA CAERULEA.**

OHLANNA. TB-M-Y9M (Small-R.C. N.); R., 1943; (from a Sdlg. line).

OH SUZANNA. TB-M-Y9M (Smith-K. N.); R., 1943; (CADETOU $\times$ MARVELOUS); #1-7; $\square$.

Ola Kola. A. I. S. Bull. 87: 30. Oct. 1942; **OLA KALA.**

OPAL WAY. TB-M-S7L (De Forest N.); R., 1943; (SALAR $\times$ INSPIRATION); $\square$ sl.

OPAQUE BEAUTY. TB-M-W4 (Tharp N.); R., 1943; (PURISSIMA $\times$ WAMBLISKA).

ORANGE BUTTERFLY. TB-M-Y7D (Long-B.R. N.); R., 1943; (GOLDEN LIGHT $\times$ LYCA); $\square$ M.

ORANGE SUNRISE. TB-LaM-Y6D (Gers. N.); R., 1943; (CHISTABEL $\times$ RUBEO (Lap.)) $\times$ (WAKARUSA); $\square$ sl.

ORANGE TORCH. TB-LaM-Y7D (Gers. N.); R., 1943; (GOLDEN LIGHT) $\times$ (MIDGARD $\times$ LIEBSCHEN); $\square$ sl.

ORCHID SPRITE. Cal-M-R7L (Nies 1943); Encino 1943; R., 1943.

OREGON TRAIL. TB-M-S6M (Klein. 1943); Cooley 1943; R., 1943; (Y Sdlg. #245 $\times$ AZTEC COPPER); $\square$.

OVERTURE. TB-M-R4L (Hall-D. 1944); Hall-D. 1944; R., 1943; (from two pink blend Sdls.); #42-20; $\square$ apple blossom; H.C., A. I. S. 1943; A. I. S. Bull. 90: 5. Jul. 1943.

- PADEREWSKI. TB-M-Y4L (Tobie N.); R., 1943; (TRIPTYCH $\times$ MAYAGUEZ); $\square$ sw.
- PAINT POT. TB-M-Y3L (Schirmer-H. N.); R., 1943; (MOONGLO $\times$ L blend Sdlg.).
- PALESTRINA. TB-M-S3M (Spender 1943); Wal. 1943; R., 1943; (EVOLUTION $\times$ DÉPUTÉ NOMBLOT Sdlg.); $\square$ sl.
- Palida Delmatica.** Amity 1943; DALMATICA.
- PAUL REVERE. TB-M-S7M (McKee N.); R., 1943; (AUBANEL $\times$ (ROSY WINGS $\times$ SUMMER TAN)); $\square$ sl.
- PEACH CREME. TB-EM-R6L (Grant N.); R., 1943; (CHINA MAID $\times$ CORAL MIST); #43-12; $\square$.
- Peach Blow.** A. I. S. Bull. 88: 28. Jan. 1943; PEACHBLOW.
- PEACH GLOW. TB-E-R4L (Klein. 1943); Cooley 1943; R. 1943; (IDANHA $\times$ sister Sdlg. #201); $\square$.
- PEEKE. TB-M-Y8M (Small-R.C. N.); R., 1943; (MME. CHEREAU $\times$ Y Sdlg.).
- PEGGY MAC. Vinic-R1D (McMillan N.); R., 1943; (coll. by McMillan 1938 in bog near Abbeville, La.).
- PEGGY WALLACE. TB-M-S4L (Wiesner 1943); Fair. 1943; R., 1943; (GUDRUN $\times$ GALLANT LEADER); $\square$.
- PERFECT PRAYER. TB-EM-WW (Gates N.); R., 1943; (PURISSIMA $\times$ VENUS DE MILO); $\square$ sw.
- PERUVIAN GOLD. TB-M-Y4D (Tobie N.); R., 1943; (parentage missing).
- Pertruchio.** Aylett 1943; PETRUCHIO.
- P. F. AYLETT. TB-M-B1D (Aylett 1938); (MODOC $\times$ DESTINY).
- PIERRE. TB-M-La-R3D (Loth. N.); R., 1943; (parentage lost).
- PINAFORE. TB-E-WW (Tharp N.); R., 1943; (MISTY MOON $\times$ JUST-RITE); $\square$ sw.
- PINK BEAUTY. TB-R7M (Aylett 1934); (Sdlg. $\times$ PHYLLIS BLISS).
- PINK ETCHING. TB-M-W8L (Webb N.); R., 1943; (SACRAMENTO $\times$ FRIVOLITE).
- PINK ORCHID. TB-R7L (Aylett 1935); (PINK BEAUTY $\times$ PHYLLIS BLISS).
- PINTO. Vinic-Y9M (Nies N.); R., 1943; (parentage lost).
- PIRATE BOLD. TB-M-La-Y9M (Hahn N.); R., 1943; (ALTA CALIFORNIA $\times$ NENE) $\times$ ((HENRI RIVIERE $\times$ DEPUTE NOMBLOT) $\times$ (HAPPY DAYS)); $\square$ str.
- POLYMNIA. TB-E-M-Y4L (Spender 1943); Wal. 1943; R., 1943; (NEW DAWN $\times$ self); $\square$ sl.
- POMPADOUR. TB-M-S7L (Stevens-W.R. N.); R., 1943; (MISS CALIFORNIA) $\times$ ((REWA $\times$ NEW DAWN) $\times$ (RADIANT MORN $\times$ NEW DAWN)); #2/P80.
- Porrina.** A. I. S. Bull. 87: 2. Oct. 1942; PORRIMA.
- Portula.** National 1943; PORTOLA.
- PREMIER. TB-La-R4L (Hall-D. N.); R., 1943; (from two pink blend Sdls.); $\square$ gr.; No. 42-57.
- PRESIDENT ROOSEVELT. TB-M-R4L (Aylett 1942); Aylett 1942; R., 1943; (MRS. VALERIE WEST $\times$ COPPER LUSTRE); $\square$ sl.
- PRESTIGE. TB-M-R7L (Woodnutt N.); R., 1943; (JULIA MARLOWE $\times$ LOS ANGELES); $\square$ sl.
- PRIDE OF WAGGA. TB-R4D (Aylett 1931); (DOMINION $\times$ R Sdlg.).

PRINCE OF DARKNESS. TB-M-B7D (Hahn N.); R., 1943; (ESPLENDIDO × BLACK WINGS) × (DYMIA × THE RED DOUGLAS); □ M.

PRINCESS OF BRENTWOOD. TB-M-S7L (Taylor-C.C. N.); R., 1943; (ANN SHERIDAN × MARGARET BOND).

PROMENADE. TB-M-La-WW (Grant N.); R., 1943; (SUNDAY BEST × CHOSEN); #43-14; □.

PURPLE MAJESTY. TB-M-B7D (Small-R.C. N.); R., 1943; (from a Sdlg. line).

Purple Queen. Jap-Dbl-6RD (McIlhenny 1943).

RADAR. TB-M-S3L (Woodnutt N.); R., 1943; (----- × -----); □ v.

RADIANT LADY. TB-E-R4M (Maxwell-A. N.); R., 1943; (ROSY WINGS × RADIANT); □ sl.

RAINBOW'S END. TB-M-Y4D (McDade N.); R., 1943; (parentage lost) □ sl.

RANGER. TB-M-R7D (Klein. 1943); Cooley 1943; R., 1943; (R Sdlg. #240 × GARDEN MAGIC); □.

Rangiiket. National 1943; RANGITIKEI.

Red Bonnett. De Forest 1943; RED BONNET.

RED GLARE. TB-M-R4D (Lap. N.); R., 1943; (EDWARD LAPHAM) × (CHRISTABEL × RED GLEAM); □ str.

RED SUNRISE. TB-EM-R6M (Gers. N.); R., 1943; (((SPRING MAID) × (RAMESES × EROS)) (Lap.)) × (WAKARUSA); □ sl.

REFLECTED LIGHT. Vinie-Y4L (McMillan 1943); Wild Gard. 1943; R., 1943; (coll. at Abbeville, La., by McMillan).

REFUGEE. TB-La-Y4M (Loth. N.); R., 1943; (NARANJA × INCOGNITO).

REQUIEM. TB-E-M-B1D (Spender 1943); Wal. 1943; R., 1943; (BRUNHILDE × BLACK WINGS); □ sl.

RESOLUTE. TB-EM-La-R6M (Grant N.); R., 1943; (THE RED DOUGLAS × E. B. WILLIAMSON); #43-3; □.

REVEILLE. TB-M-R4L (Tobie N.); R., 1943; (CLOVELLY × MELITZA); **Revelry.**

Revelry. A. I. S. Bull. 90: 92. July 1943; REVEILLE.

RICOCHETTE. IB-M-La-W7L (Peckham N.); R., 1943; (parentage lost); #40-75-50A; □.

RIGAUDON. TB-LaM-S6M (Spender 1943); Wal. 1943; R., 1943; (KING'S TREASURE × DEPUTÉ NOMBLOT Sdlg.); □.

Rockwood (Wmsn.). National 1943; ROOKWOOD (Wareham).

ROSE PEARL. IB-E-R3M (Salb. N.); R., 1943; (MISS CALIFORNIA × GOLDEN MAJESTY).

Rosy Wing. Hahn 1943; ROSY WINGS.

ROYAL ABUNDANCE. TB-EM-La-Y4M (Wareham N.); R., 1943; (from Sdls. derived from *trojana* and DOMINION).

RUBIES RED. TB-E-R1D (Callis 1942); Callis 1942; R., 1943; (RED ORCHID × RED RADIANCE); □ r.

RUFUS. Vinie-R4D (McIlhenny 1943).

RUTH MARSALIS. Vinie-B1M (Debaillon; Dormon 1943); Wild Gard. 1943; R., 1943; (natural hybrid from Debaillon collection 1941).

SALLY ANN. TB-E-La-Y4L (Smith-K. N.); R., 1943; (KALINGA × JELLOWAY); #K-5.

SAN PASQUAL. TB-E-B1D (Milik. N.); R., 1943; (INCOGNITO) × ((CALIFORNIA BLUE × SOUV. DE MME. GAUDICHAU) × (BLUE VELVET)); #2086-7.

SANTA ROSA. TB-M-R9M (Mit. 1943); Salb. 1943; R., 1943; (MONADNOCK × Sdlg.).

SARAH GOODLOE. TB-M-La-R7M (Douglass-G. N.); R., 1943; ((FRANCESCA × Y Sdlg.) × (RADIANT)) × (GAY TROUBADOUR); □.

SARAH KINISH. TB-LaM-B1M (Kinish N.); R., 1943; (WINNESHIEK × SIERRA BLUE); □ lil.

SARD. TB-M-R4M (Loth. N.); R., 1943; (Sdlg. × CHEERIO).

Schrevei Special. Laev-B1-L. McIlhenny 193.

SEA OTTER. TB-La-S6D (Hall-D. N.) R., 1943; (JEB STUART × very dark brown Sdlg.); □ apple blossom.

SEPTEMBER SPARKLER. TB-Re-B1D (Brown N.); R., 1943; ((AUTUMN ELF × AUTUMN KING) × (AUTUMN ELF)) × (AMBROSIA).

SEQUATCHIE. TB-M-La-S7D (Cald. N.); R., 1943; (YUCATAN × JEAN CAYEUX) × (CELLOPHANE × blue Sdlg.); #72-42; H. C., A. I. S. 1943; A. I. S. Bull. 90: 5. July 1943; □ sl.

SERENATA. TB-M-S7L (Milik. N.); R., 1943; (sister to FORT KNOX) × (CHINA MAID × DAUNTLESS Sdlg.); #2438-13.

Serinite. National 1943; SERENITE.

Shahjehan. Amity 1943; SHAHJEHAN.

SHEILA MARTIN. TMB-M-S6D (Aylett bef. 1942).

SHOWOFF. TB-M-S7D (Lap. N.); R., 1943; (WAKARUSA × RED RAY); □ M.

SIESTA. TB-M-Y4L (Smith-K. N.); R., 1943; (CAROLINE BURR × MOON MIST); #2-2.

SINGAPORE BELLE. TB-M-S4L (Hahn N.); R., 1943; (NARANJA × MARY GEDDES) × (JEAN CAYEUX × RAMESES); □ str.

SINGING WATERS. TB-M-Y9L (Wareham N.); R., 1943; (from Sdls. derived from *trojana* and DOMINION).

SIR WALTER. TB-E-B1D (Shank 1943); Berry 1943; R., 1943; (SOUV. DE MME. GAUDICHAU) × (CONQUISTADOR × SOUV. DE MME. GAUDICHAU).

SISTER ILLEENE. TB-M-S7D. (Small-R.C. N.); R., 1943; (from a Sdlg. line).

SLEEPY HOLLOW. TB-E-M-B1M (Milik. N.); R., 1943; (ROYAL SALUTE × THE BLACK DOUGLAS); #1922-25.

Smoulder. A. I. S. Bull. 88: 49. Jan. 1943; SMOLDER.

SO BIG TEXAS. TB-La-B1L (Taylor-W.E. N.); R., 1943; (parentage lost); □ none.

SOLID MAHOGANY. TB-La-R4D (Sass-J. N.); R., 1943; (CITY OF LINCOLN × 38-13); #41-23; H. C., A. I. S. 1943; A. I. S. Bull. 90: 5. July 1943.

SORREL TOP. TB-M-Y8M (Mit. 1943); Salb. 1943; R., 1943; (PALO ALTO × ORLOFF).

SOUTHERN BREEZES. TB-E-M-S7M (Tharp N.); R., 1943; (SUNBURST × MY CHOICE); ☐ sw.

SPANISH BEAUTY. TB-M-S7M (Covert N.); R., 1943; (SANDIA × Pi Sdlg.); ☐ sl.

SPANISH MAIN. TB-M-La-Y9M (Hahn N.); R., 1943; (ALTA CALIFORNIA × NENE) × ((HENRI RIVIERE × DEPUTE NOMBLOT) × (HAPPY DAYS)); ☐ str.

Sparkling Burgundy (Snyder). A. I. S. Bull. 91: 23. Oct. 1943; GUINARD.

SPOT OF BLUE. TB-M-B1L (Schroeder N.); R., 1943; (AMIGO × GLORIOLE); ☐ sl.

SPOTTS. TB-M-W8D (Aylett 1938); (CALIFORNIA BLUE × SAN FRANCISCO).

SPRING MEADOW. TB-M-B1D (Millik. N.); R., 1943; ((CALIFORNIA BLUE × SOUV. DE MME. GAUDICHAU) × (BLUE VELVET)) × (BRUNHILDE); #2158-3.

ST. ANNE. TB-M-La-B1M (Meyer-H.R. N.); R., 1943; (parentage lost); ☐ none.

STARHELL. TB-La-R4D (Jones-W.A. N.); R., 1943; ((GREY DOVE: (JEAN CAYEUX × W Sdlg.)) × (R Sdlg. from FLORA CAMPBELL)); ☐ sl.

ST. BONIFACE. TB-M-B1D (Meyer-H.R. N.); R., 1943; ☐ none.

ST. DOMINIC. TB-M-B7D (Meyer-H.R. N.); R., 1943; ☐ none.

STOLEN THUNDER. TB-MLa-S1D (Emery-E.A. N.); R., 1943; (SENSATION) × (MATULA × HAPPY DAYS); ☐ none.

ST. ROLLOX. TB-M-Y6D (Meyer-H.R. N.); R., 1943; ☐ none.

SUMATRA. TB-M-S4L (Hahn N.); R., 1943; (NARANJA × MARY GEDDES) × (JEAN CAYEUX × RAMESES); ☐ str.

SUMMER ERMINE. TB-EM-MLa-R4L (Wareham N.); R., 1943; (from Sdlgs. derived from *trojana* and DOMINION).

Summer Skies. A. I. S. Bull 89: 22. April 1943; AZURE SKIES.

SUNSET GLEAM. TB-M-S4L (Hahn N.); R., 1943; (NARANJA × MARY GEDDES) × (JEAN CAYEUX × RAMESES); ☐ str.

SUNSET GLORY. TB-LaM-S6M (Norton-L. N.); R., 1943; (PRAIRIE SUNSET × AT DAWNING); ☐ sl.

SUNSET HAZE. TB-M-R4L (Millik. N.); R., 1943; (sister to FORT KNOX) × ((CHINA MAID) × (DAUNTLESS cross)).

SUSAN TERRY. TB-E-B7M (Creelman N.); R., 1943; (Parentage lost); ☐ sl.

SUZETTE. TB-M-Y5L (Knowlton N.); R., 1943; (SEDUCTION × TIFFANY); ☐ sl. le.

SWAN OF AVON. TB-M-WW (Spender 1943); Wal. 1943; R., 1943; (PURPLE DUSK × NEW DAWN); ☐.

SWEET CREAM. TB-EM-W4 (Shank N.); R., 1943 (PURISSIMA × Yellow M.).

SYLVIA MACDONALD. TB-M-Y7D (Aylett 1942); Aylett 1942; R., 1943; (NARANJA × HAPPY DAYS); ☐ sl.

SYLVIA MURRAY. TB-EM-B1L (Norton-L. N.); R., 1943; (GREAT LAKES × SHINING WATERS); ☐ str.

- Taffany.** Aylett 1943; TIFFANY.
T. C. BLACK. TB-B1D (Aylett 1929); (LADY FOSTER × ALCAZAR).
- TEMPLE FIRE. TB-M-R6M (Tharp N.); R., 1943 (CLARA NOYES × SAVING GRACE).
- Teneya.** Hahn 1943; TENAYA.
- Tenaza.** Aylett 1943; TENAYA.
- Terra Cotta.** Keller 1943; TERRA COTTA SKY.
- TERRA COTTA SKY. IB-La-R6D (Keller 1943); Keller 1943; R., 1943; (Sdlg. × Sdlg.); Tab I.; **Terra Cotta** (Keller).
- Tint-O-Tan.** Hahn 1943; TINT O'TAN.
- THE BLACK FLASH. TB-M-B7D (Hahn N.); R., 1943; (ESPLENIDO × BLACK WINGS) × (DYMIA × THE BLACK DOUGLAS); □ M.
- THE BROWN FLASH. TB-M-R4M (Hahn N.); R., 1943; (JUNALUSKA × JERRY) × (WAR EAGLE × Sass 30-40); □ pl.
- THE CHIEFTAIN. TB-VLa-R4M (Clevenger N.); R., 1943; (DAUNTLESS × EVOLUTION); □ none.
- THE CHOCOLATE SOLDIER. TB-M-La-S7D (Tompkins N.); R., 1943; (LOUVOIS × SHIRVAN); □ sl. gr.
- THE MAHARAJAH. TB-M-La-Y9M (Hahn N.); R., 1943; (ALTA CALIFORNIA × NENE) × ((HENRI RIVIERE × DEPUTE NOMBLOT) × (HAPPY DAYS)); □ str.
- THE MISSIMO. TB-La-Y1D (Millik. N.); R., 1943; (from a line of Sdls. derived from LE GRAND FERRE, DOLLY MADISON, GRACE STURTEVANT, CHOSEN, SHINING WATERS, AURIFERO and PALE MOONLIGHT); □.
- THE NABOB. TB-M-La-Y9M (Hahn N.); R., 1943; (ALTA CALIFORNIA × NENE) × ((HENRI RIVIERE × DEPUTE NOMBLOT) × (HAPPY DAYS)); □ str.
- THE VICEROY. TB-M-S9M (Gers. N.); R., 1943; (FRANCESCA × FRANK ADAMS); □ sl.
- THUNDER. TB-M-B7D (Hahn N.); R., 1943; (ESPLENIDO × BLACK WINGS) × DYMIA × THE BLACK DOUGLAS); □ M.
- Timati-Hime. Jap-Sgl-2WD; McIlhenny 1943.
- TIMOLEON. TB-EM-Y9M (Spend-er 1943); Wal. 1943; R., 1943; (GOLDEN HIND Sdlg. × MRS. VALERIE WEST Sdlg.); □.
- TINY TONY. DB-E-R7D (Hillson N.); R., 1943; (TONY × PUMILA ATROVIOLACEA); □ sl.
- TINY TREASURE. DB-E-Y4M (Hillson N.); R., 1943; (YLO × ARENARIA); □ sp.
- TITIAN PRINCESS. TB-M-S7L (Douglas-G. N.); R., 1943; (SAM DAVIS × W Sdlg.) × (MELITZA); □.
- TONALEA. TB-M-R4M (De Forest N.); R., 1943; (E. B. WILLIAMSON × PRAIRIE SUNSET).
- TOPAZ ROSE. TB-M-S7M (Woodnutt N.); R., 1943; (Ro Sdlg. × GOLDEN TREASURE); □. M.
- Toussaint De Loverture.** A. I. S. Bull. 87: 65. Oct. 1942; TOUSSAINT L'OUVERTURE.
- TRADE MARK. TB-M-Y9D (Small-R.C. N.); R., 1943; (from a Sdlg. line).
- TRAFALGAR. TB-M-S9M (Stevens-W.R. N.); R., 1943; ((REWA × WELLINGTON) × (SUNBURST)); #1/01.
- TREVA. TB-M-La-Y7M (De Forest N.); R., 1943; (RIO ORO × SANDALWOOD Sdlg.).

TRY AGAIN. TMB-M-La-B7M (Aylett 1942); Aylett 1942; R., 1943; (GRACE MOHR × MOHRSON); □ sl.

TUNIS. TB-EM-R7L (Webb N.); R., 1943; (MISS CALIFORNIA × NO-WE-TA).

TUNISIAN GOLD. TB-M-S4M (Tompkins N.); R., 1943; (FAR WEST) × (AMITOLA × SANDALWOOD).

UNFINISHED SYMPHONY. TB-M-R4L (Long-B.R. N.); R., 1943; (RAMESES) × (THEOTORMON × IVORY GATE); □ str.

VAL. TB-M-S3L (Brenan N.); R., 1943; (BROWN BETTY × MAUNA LOA).

VELVET ENVOY. TB-M-S4D (Stevens-W.R. N.); R., 1943; (DARK KNIGHT × INSPIRATION) × (WINSTON CHURCHILL); #3/P72.

VICTORY V. TMB-M-WW (Aylett 1942); Aylett 1942; R., 1943; (GRACE MOHR × SNOWKING) × (PURISSIMA × GRACE MOHR); □ none.

Violet Sympathy. National 1943; VIOLET SYMPHONY.

VIOLET WAVE. Sib-La-B1D (Spender 1943); Wal. 1943; R., 1943; (EMPEROR × Sdlg.) × (*chrysographes* Sdlg.).

WADI ZEM - ZEM. Spur-Y4M (Millik. N.); R., 1943.

WAR AND PEACE. TB-E-M-S6D (Long-B-R. N.); R., 1943; Selected for Trial at Wisley 1943; shown at R. H. S. Hall May 1943 as **Shangri-la**; □ M.

WHEATLAND. TB-M-Y4M (Covert N.); R., 1943; (GOLDEN AGE × NARANJA); □ sl.

WHITE LONGFALLS. TB-M-WW (Tobie N.); R., 1943; (GUDRUN × NANNIE HILL).

WHITE MEMORIAL. TB-VLa-WW (Gates N.); R., 1943; (PURISSIMA × VENUS DE MILO); □ sw.

WHITE OAKDALE. TB-M-W6L (Hoisholt 1943); Salb. 1943; R., 1943; (parentage unknown).

WHITE SAMITE. TB-M-W4 (Norton 1943); Schreiner 1943; R., 1943.

WHITE SPIRE. TB-M-WW (Millik. N.); R., 1943; (parentage uncertain).

WIDGET. IB-EM-W2M (Wmsn. N.); R., 1943; Tab I.; □ none.

WILD SWAN. Vinic-WW (Debailon 1943); Wild Gard. 1943; R., 1943; (coll. wild vicinity of New Orleans, La., about 1933).

WINANDER. Sib-LaM-B1M (Spender 1943); Wal. 1943; R., 1943; (EMPEROR Sdlg. × Sdlg.).

WING COMMAND. TB-M-R4D (Tompkins N.); R., 1943; (CEDAR ROSE × RED BONNET); □ gr.

Winneshick. Aylett 1943; WINNESHIEK.

WINSOME BLUE. TB-M-B1M (Horton N.); R., 1943; (NENE × INDIAN HILLS).

Winston Churchill (Aylett). A. I. S. Bull. 85: 27. Apr. 1942; GENERAL SIR THOMAS BLAMEY.

WINTER REVERIE. TB-E-WW (Hodson N.); R., 1943; (GLORIOLE × GUDRUN); □ str. pl.

WITCHES DANCE. TB-La-S9D (Clevenger N.); R., 1943; (SHAH JEHAN × EL TOVAR); □ none.

WOOD VIOLET. D-Vinic-B1M (Dormon-R. N.); R., 1943; (natural hybrid in Dormon-R. garden of natives 1940).

WORTHINGTON. TB-M-R6D (Cook N.); R., 1943.

YELLOW BIRD. TB-M-Y1D (Keller 1943); Keller 1943; R., 1943; (Sdlg. $\times$ Sdlg.); **Butterfly** (Keller); $\square$.

Yellow Fulva. A. I. S. Bull. 91: 12. Oct. 1943; MARINGOUIN FULVA.

YELLOW OPAL. Cal-M-Y4L (Nies 1943); Encino 1943; R., 1943.

*YOLA BOLI. Etc.; (Essig N.); etc.

YORKTOWN. TB-M-La-B7M (Peckham N.); R., 1943; (AMRITA $\times$ Sdlg.) $\times$ (PARTHENON); #38-35-93A; $\square$ sl. sw.

Yucan. Sib-B1M (Preston); A. I. S. Bull. 91: 20. Oct. 1943.

ZAPATEO. TB-M-La-R3D (Peckham N.); R., 1943; (VALOR $\times$ CYRUS THE GREAT); #40-5-98; $\square$ sl. sw.

ZARZUELA. TB-M-La-W9L (Peckham N.); R., 1943; (IMPERIAL BLUSH $\times$ Sdlg.); #39-45-50; $\square$ sl. sw.

ZYQUIFLA. TB-M-S7M (Small-R.C. N.); R., 1943; (from a Sdlg. line).

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BULLETIN
OF THE
AMERICAN IRIS SOCIETY

MAY, 1944

No. 93

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THE AMERICAN IRIS SOCIETY

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THE EDITOR'S BULLETIN BOARD

■ IN RESPONSE to many requests from our readers, we are presenting in this issue of the BULLETIN articles that are primarily for the benefit of amateurs and new members. While we have tried to cover a good deal of ground, there are, no doubt, other phases of iris growing which would be of interest, and we shall endeavor to print at least one or two articles of an elementary nature in all future issues. In this connection, the Editor would like to hear from the readers about which subjects they would like to have discussed and whether they feel that the articles in this number have been adequate for their preliminary instruction. We are indebted to our president, Mr. Jesse Wills, and to several of the other directors for preparation of material.

Of interest to our fanciers and hybridizers is Mr. Kenneth Smith's Iris Symposium, in which a larger number of Accredited Judges have participated than in any previous one that he has conducted, and the results give us a good yardstick as to which are leading iris varieties today.

Due to the paper shortage, the BULLETIN is conforming to the WPB wartime restrictions in reducing, for the time being, its page size and in using a lighter paper stock. This does not affect the amount of printed matter on the page, and by effecting these paper economies, we hope to continue to print BULLETINS with approximately the same number of pages as before.

F. W. CASSEBEER, *Editor*



Cooley Iris Gardens

*Great Lakes, the superb light blue iris which again ranks first in
Kenneth Smith's Symposium.*

MEET THE AMERICAN IRIS SOCIETY

■ IT HAS seemed wise to the directors to devote this number of the BULLETIN largely to our new members in an effort to give them a better understanding of what the American Iris Society is, what it is trying to accomplish, and what it has to offer. The Editor has also tried to make it in some degree at least a primer on iris and their culture. BULLETIN No. 10, issued in January 1924, was designed to serve this purpose, but in most respects it has long been obsolete.

This introduction tries to give a brief picture of the American Iris Society as it is today, or it might be more accurate to say a picture of it as it was just before the war, since some activities, such as our annual meeting, have had to be suspended temporarily or curtailed. We hope, however, that it will not be too long before our meetings can be resumed. On the following pages you will find other articles about the activities of the Society and about the iris themselves and their culture. The directors and the Editor sincerely hope that this BULLETIN will be of real interest and help to all new members and iris beginners, that it will give them the background for a better understanding of other BULLETINS, and that by introducing them to a new and fascinating interest or hobby it will make all of them lifetime members.

As stated in the by-laws, the purpose of the American Iris Society is "to promote the culture and improvement of the iris." It is an association of people who are interested in or who grow iris for their mutual benefit and pleasure. It is a means whereby iris enthusiasts get together in person, through the BULLETINS, or through correspondence. It is a medium for collecting information and ideas and of sharing and preserving them. It seeks to find and teach better ways of growing iris, alone or in combination with other plants. It encourages the collection and growth of different species and the improvement of various kinds through the breeding of new and improved varieties. One of its announced objectives is to promote scientific research, but, to be honest, not a great deal of this is being done, though more could and should be.

Our Society is composed chiefly of members who grow iris for pleasure rather than for profit or to advance science. We have a number of valuable members, however, who might be classed as professionals in more or less degree. A few have large commercial gardens, specializing in iris and perhaps a few other flowers. There

are also breeders who sell their own introductions, and some other members, who started purely for their own pleasure, issue price lists to dispose of their surplus roots. All of these make iris their hobby as well as a source of profit, and they understand and share in the viewpoint of the amateur who buys from them. The majority of our members are amateurs, and the spirit and direction of the Society has always been amateur.

The membership has been for some time around 1,000. The war checked growth, but did not cause retrogression. Hundreds have been members over a period of years. Most of these prefer to renew their annual membership dues of \$3 a year, but a number pay tri-annually. Some are sustaining members, who pay \$10 a year, and there are about 75 life members who made one payment of \$50.

The Society is interested in all species and varieties of iris. The majority of members, however, are most interested in the tall bearded kinds, and there is always a danger of becoming unbalanced in this respect. More people than do should grow some of the many varieties of beardless, try out the native American kinds and their hybrids, or collect and study the rarer species.

You, Mr. or Mrs. New Member, in the beginning may be interested only in growing well a few good iris along with your other perennials, but you should be warned that you face the danger of developing into one of those types of members who make iris a very special hobby. Iris enthusiasm is very contagious. You may become a collector, adding variety after variety to your list until you are hard put to find space for new ones. You may be intrigued by the problems of how to plant iris, either how to combine them with what other flowers or how to display them best alone, which will lead you into questions of color combination and season of bloom, or you may take a try at the most fascinating game of all and become a breeder or hybridizer. It is hard to say how many there are of these among our members because it takes a strong soul to resist the temptation to make at least a few crosses and raise a few seedlings.

Organization of the Society

The Society is governed by a board of 12 Directors, elected for terms of three years. The terms of four Directors expire each year, and their successors are elected by a mail ballot of the membership. Nominations are made by the Directors, but there can also be nominations by petition from the membership. The Directors annually

elect the President, Vice-President, Secretary, and Treasurer. The Board of Directors also appoints the Editor of the BULLETIN and other special officers and committees. The President, with the advice and consent of the Directors, appoints the Regional Vice-Presidents who preside over the 16 regions into which the United States and Canada are divided.

Activities of the Society

The most important activity is the annual meeting of the membership, which before the war was always held during blooming season, usually in a different section of the country each year, but always in an area where there were good collections of new iris. The meeting usually lasts two days, and combines a short business session and entertainment features, such as a banquet, with the most important part of all, the visits to the gardens. The Board of Directors transacts business at the time of the annual meeting, and usually also holds a fall or winter business meeting at some convenient place. There are various regional or local meetings, particularly in sections where the Iris Society membership is most concentrated.

Registrations

Another activity of the Society is to record names and brief descriptions of all the many kinds and varieties of iris, and the Registrar, who keeps the card index of these, is a most important and responsible officer. Through the cooperation of members and growers, his work almost entirely prevents the duplication of names and confusion of varieties. When a breeder decides to name a new seedling, he submits the proposed name to the Registrar, together with a brief description stating the kind of iris, color, height, season of bloom, whether or not fragrant, and usually the parentage. The Registrar informs him whether or not the name has already been used. If it has, he is asked to choose another name; if not, that name, with the description, is registered to that particular breeder. Of course, there is no way of compelling registration, but its advantages are so obvious that it is practically always done if there is any possibility of an iris ever being introduced to commerce. English, French, and other foreign varieties are also registered with the American Iris Society. In 1939 a *Check List* was published, con-

taining names with brief descriptive data of all species and varieties up to that date, and a Supplement to this was put out in July 1942. Subsequent registrations are published from time to time in the BULLETINS.

The Awards Committee

The work of this committee is most important. Members of the Society in various regions of the country are appointed to the positions of Accredited Judges by the President and the Board of Directors, usually on the recommendation of the Regional Vice-President. In 1943 there were 250 such judges. They vote each year for the various awards of the Society, and also rate new varieties according to a numerical system. It is the duty of the Awards Committee to prepare and send out instructions, ballots, and rating sheets for the judges, to tabulate the results of the voting, and to make recommendations as to awards to the Directors.

There are four awards which an iris may receive from the Society: Highly Commended, which goes to a new seedling; - Honorable Mention, which can be given only after an iris has been introduced (this means formally put on sale); Award of Merit, to be eligible for which an iris must have an Honorable Mention; and last and highest, the Dykes Medal.

The Exhibition Committee

This committee encourages and sponsors iris exhibitions in various parts of the country. A garden club or other local group wishing to stage an iris show under the auspices of the Society communicates with the exhibition chairman for instructions and help. Such a show must be held in accordance with the rules of the Society, and the judges must be accredited. A bronze and silver medal, as well as ribbons, may be given at such exhibitions. Bronze medals are temporarily unavailable because of the war.

The Slides Committee

This committee maintains a collection of color slides, mostly of new iris, which is available to members for a rental fee. Color photography should be further improved after the war, and we hope not only to keep our slide collection up to date, but to make it much better. The chairman will be glad to answer inquiries.

The BULLETINS

The BULLETINS undoubtedly mean more to the average members than any other activity of the Society. For some time there have been four issues a year: one in January or February; one in April or May; one in late summer, and one in the late fall. The first number usually contains official reports covering the previous year, as well as other material. The late summer issue contains the awards, and also detailed descriptions of the previous blooming season in various parts of the country. The other BULLETINS contain a variety of articles of general and special interest. The Editor does his best, sometimes without much cooperation, to keep the articles diversified and representing a proper balance between the various interests of the members.

The Iris Society belongs to its members, and what its future will be depends in turn on what the members want and the interest they show. It takes new members, the sort of new members who will become permanent, to keep the Society vigorous and growing. New prospects are always needed for Accredited Judges, Regional Vice-Presidents, and Directors. In conclusion, however, always remember one thing: the Iris Society is not an end in itself, but a means to an end. The end is the growth and enjoyment of the iris themselves.

THE IRIS FAMILY

GEDDES DOUGLAS

■ THE MANY beautiful iris which grace our gardens today represent a comparatively small section of a very large family of plants known as Iridaceae. The most useful for garden effect and the most easily grown are the bearded, the Siberians, the Kaempferi, and the spurias.

However, for a better understanding of just what the iris family consists of, we shall outline in greater detail its principal divisions.

With the exception of three rare and relatively unknown plants which might be termed botanical curiosities, all iris that are not bulbous have rhizomes. Horticulturally, this is an important division. The culture and treatment of the bulbous species and varieties are entirely different from the culture of the rhizomatous kinds. The three iris referred to above are *I. nepalensis* and *I. Colettii*, and *I. sisyrinchium*. The first two form a separate section of the genus by themselves for there are no other similar species. They grow from neither bulbs nor rhizomes, but rather from a rootstock consisting of a bundle of roots similar to hemerocallis. *I. sisyrinchium* should properly be classed with the Moraeas for it grows from a

corm which consists of a uniform substance throughout, whereas a bulb is composed of layers or skins as in an onion.

Iris have some near and distant cousins whose kinship one would never suspect. However, they all belong to the family Iridaceae along with the genus *Iris* and some of the more familiar are listed with their common names as follows:

Balanocanda (Blackberry Lily)	Marica
Crocus	Morea (Wedding Iris)
Freesia	Schixostylis (Crimson Flag)
Gladiolus	Sparaxis (Wand Flower)
Hermodyctylus (Snakes Head Iris)	Tigridia (Tiger or Shell Flower)
Ixia	Tritonia (Blazing Star)

Botanically the genus *Iris* is divided into 12 divisions or sections. Three of these sections belong to the Bulbous group, and seven to the Rhizomatous group. The remaining two groups are formed by the three species referred to above, and may be eliminated from this discussion. The three bulbous sections are called Juno, Xiphium and Reticulata and several members of these groups will later be discussed at some length.

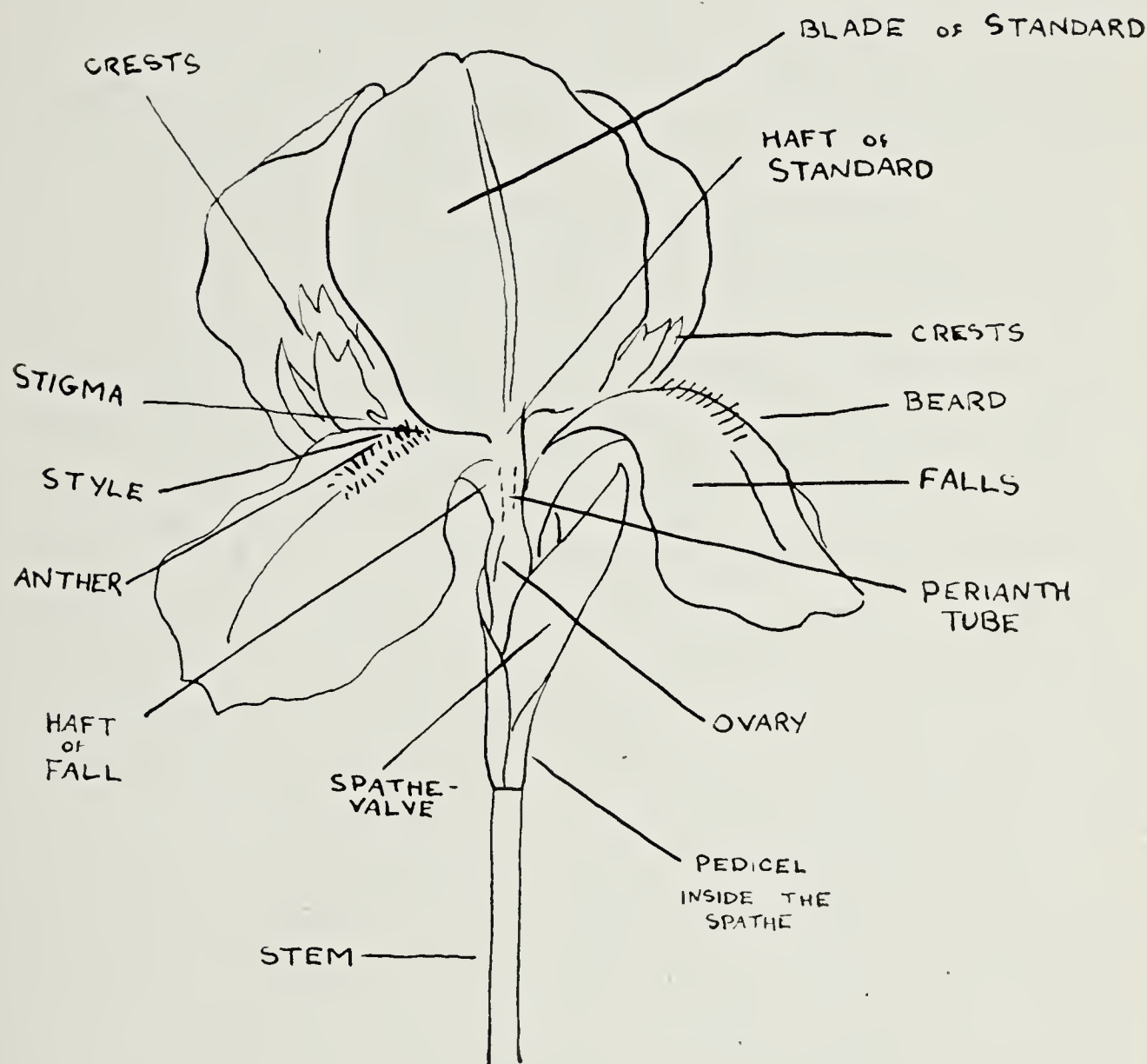
To understand the seven divisions of the rhizomatous group, it is first necessary to understand something of the actual iris flower. By referring to the diagram on page 9, it will be noted that it consists of three outer segments called the falls, and three inner segments called the standards. That part of both the standards and the falls which unites in the center of the flower is called the haft, and over the haft of each fall arches one of the three branches of the style. Each style branch ends in two triangular crests under which is the stigma to which the pollen must be conveyed to fertilize the flower. Under the style branches lie the anthers supported by slender rods called filaments. At their base the falls and the standards unite to form the perianth tube which leads to the ovary. This in turn is supported on a short stem called the pedicel and enclosed in the spathe. The spathe valves may be scarious (dry and papery) or they may be herbaceous and their function is to protect the bud until it is ready to open.

On some iris, in the center of each fall extending from near the base of the haft to well over the outer curve is a hairy line called the beard. This furnishes the key to the two most important sections of the rhizomatous group, the Pogon Iris or Bearded Iris and the Apogon Iris, or the Beardless Iris. Most of the garden iris of today come from the Pogon sections, but in nature the widest distribution of species occurs in the beardless group.

Midway between the bearded and the beardless is the Crested or Evansia group. On these iris the hairs of the beard are replaced by a linear crest like a single cock's comb. This small group of some eight species was named after Thomas Evans in recognition of the fact that he introduced into England the first known member of this section, *I. japonica*.

The remaining four sections of the rhizomatous group are of lesser importance. One section called Pardanthopsis contains only one member, *I. dichotoma*. This is known as the vesper iris and blooms in August. It

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is not hardy in northern climates and usually dies after blooming. This makes it necessary to treat it as a biennial, growing each successive crop from seed.

For practical purposes the three remaining sections, *Pseudoregelia*, *Oncocyclus*, and *Regelia*, are discussed as a unit. The species composing these groups are rare and very difficult to grow. The hybrids from these groups are, however, of increasing importance and are now finding a place for themselves in many gardens.

This completed a more or less panoramic picture of the Iris Family. To review, and leaving out those which are unimportant horticulturally, there are the following sections: the Bulbous, the Bearded, the Beardless, the Crested, and the Cyclus. Hybrids from these various groups make up the garden iris of today. The original species from which these hybrids were developed were found in many parts of the world. Often the hybrids from

them inherit certain growing tendencies or characteristics indigenous to that particular geographical location from which the parent species originated.

In the belief that this fact is of the utmost importance in successfully growing the various kinds of iris, the following discussion is largely from this viewpoint.

The Bulbous Iris

All bulbous iris originate from the territory adjacent to the Mediterranean Sea, both in Europe and North Africa, ranging from Spain and Portugal in the West, to Palestine and Turkestan in the East, and also in Southern Asia. This means first of all that bulbous iris are flowers for a warm climate. In the Reticulata section there are some seven species and only two are suitable for the average American garden. *I. reticulata* itself, a native of Caucasus, is a very worthwhile plant, particularly for the front of the border and for rock gardens. It flowers very early along with the crocus and sends its bloomstalk up at the same time as the leaves. In color it may be either blue-purple or red-purple, and the small flowers have no stem but are raised upon a long perianth tube some six inches in length. *I. reticulata* is of strong constitution and increases rapidly if planted in a sunny, partially protected, well-drained situation.

I. histrioides, a bright blue-purple native of Asia Minor, is similar to *I. reticulata* in its requirements. This is a very rare iris, but was obtainable from some of the Dutch bulb growers before the war. It sends up its bloomstalk even before the leaves appear and for this reason good bloom may be expected. The other members of this section (Reticulata) notably *I. Danfordiae* and *I. Bakeriana*, will send up their leaves in mid-winter and will be killed back. Even though the plant survives, it will not bloom for it cannot ripen a strong, vigorous bulb if its foliage is destroyed at an early stage in its development, since the sustenance derived from the soil must first be modified by the action of the light on the chlorophyll of the leaves before it can be stored up in the new bulbs that form for the succeeding year.

The various members of the Juno section of the bulbous group are not satisfactory iris for the amateur gardener, for two reasons: first, they are tender and need very special care; second, attached to the base of the bulb are many fleshy roots which are very brittle. If these roots are broken off, the bulb will not flower and will eventually die. They grow best in heavy clay soil, which makes it virtually impossible to dig them without breaking off these roots. If these difficulties can be avoided, *I. persica* will be found to be one of the most beautiful of all rock garden plants. The small orchid-like flowers of bright seagreen-blue with an orange eye are borne on short two-inch stems.

While the Juno iris are rare and unimportant, the Xiphium section of the bulbous group furnishes us with the Dutch and Spanish iris and also the English iris. Commercially, the Dutch and Spanish are the most important members of the whole iris family. The reason for this is that the flowers ship with ease and have enough substance to last a long time in the

florist shop. Nurserymen from Florida to Texas grow hundreds of acres of these iris, which are cut when the color begins to show and are shipped to northern markets. The Dutch iris are not natives of Holland, as the name would imply, but rather were developed there by Mr. Hoog of the firm of C. G. Van Tubergen. They are hybrids probably arising from an early flowering form of Spanish iris called *I. xiphium praecox*, crossed with garden hybrids descending from *I. xiphium* and *I. tingitana*. *I. xiphium* is a native of Spain, Portugal and North Africa, and *I. tingitana*, as the name indicates, is a native of Tangiers. The Spanish iris which we grow today are garden hybrids arising from *I. xiphium* and bloom slightly later than the Dutch varieties.

In their native habitat the parent species were accustomed to a long, dry resting period after blooming and plenty of moisture during their growing and blooming season. This should be remembered for it is just as important with the modern varieties. Also the Spanish and Dutch iris will send up their foliage in the early winter. To avoid this, the standard practice is to lift the bulbs in late summer and store them in a dry place. This allows the bulb to ripen, winter kill will be avoided, and early spring growth will be retarded. Some reliable varieties which are available are:

BRONZE QUEEN.	Large flower of deep bronze. Golden eye on falls.
GOLDEN LION.	Deep ruffled orange yellow self. Outstanding.
IMPERATOR.	Brilliant blue, orange lip.
REMBRANDT.	Dark blue with yellow marking on falls.
WEDGEWOOD.	Early deep blue.
WHITE EXCELSIOR.	Pure white.

The so-called English iris is not English at all. The modern forms are garden hybrids descending from *I. xiphoides*, a native of the Spanish Pyrenees. It was first reported as having been found near Bristol, but was doubtless brought to this early seaport from Spain. The key to its successful cultivation is found in the fact that it is native to the alpine pastures where there is always moisture beneath the surface of the soil. It will not succeed in hot or dry situations. In appearance the English iris differ somewhat from the Dutch and Spanish in that the standards are shorter and more rounded. The falls are also larger, tapering to a decided point in some cases. The following are some of the better known varieties:

MONTBLANC.	Pure white self.
NESTOR.	S. Cattleya-rose. F. Pale blue.
OTHELLO.	S. Light blue. F. Deep blue.
MANSFIELD.	Deep purple-blue.
SUNSET.	Yellow.

The Evansia Section

I. tectorum is the best known of the eight species comprising the Evansia or Crested section. It first became known as a plant growing on the ridge of the thatched roofs in Japan, but probably is a native of central and southwestern China. The gray-blue-lilac flowers grow on a 15-inch branching stem and are blotched with deeper spots of the same color. On the

falls there is a conspicuous white crest flecked with brownish purple. *Tectorum* is a shallow-rooted plant and is a heavy feeder, needing rich soil and good drainage. There is a white form, *I. tectorum alba*, which is very lovely but hardly as vigorous as the blue variety. The culture of *I. tectorum* presents no difficulty, and it is hardy over most of the United States.

I. gracilipes, a native of Japan, is a beautiful dwarf iris and when once established is quite satisfactory as a rock garden plant. Its pinkish mauve flowers, hardly more than 1½ inches in diameter, are carried on a ten-inch stem. *I. gracilipes* should never be moved except in spring or early summer when growth is active. The slender rhizome sends out comparatively few root fibers and the plant can be moved only when these are being formed.

I. cristata, the Crested iris, is native to the southeastern states from Georgia to Ohio. This miniature iris is especially adaptable to the wild garden. It prefers semi-shade and slightly acid soil rich in humus. It should be moved in spring or early summer. It is extremely difficult to establish this plant if transplanting is attempted in late summer or autumn, for the new roots so necessary for it to take hold in its new location are formed only during a short period after it flowers. The miniature pale lilac blossoms have a central white crest tipped with orange along the haft. On the blade of the falls there is a conspicuous white patch edged with deep lavender, which fades out towards the edge of the petal. There is a local northern form of *I. cristata*, called *I. lacustris*, found in the vicinity of the Great Lakes. It is slightly smaller than *Cristata* and slightly darker in color.

For the greenhouse or conservatory there are two members of the *Evansia* section which are unusual and beautiful, *I. japonica* and *I. Wattii*. Both may be grown in the open in California and with slight protection in the deep South. *I. japonica* has a tall, many-branched stem bearing a succession of pale lavender, wavy-flat flowers whose segments have jagged edges. The flowers of *I. Wattii* are similar except that they are white tinged with mauve.

Although the Crested iris have been in cultivation a very long time, efforts to create hybrids from them have been singularly unsuccessful. Notable exceptions are iris NADA, PALTEC, and OLIVER TWIST. NADA (Giridlian 1936), a hybrid of *I. japonica* × *I. Wattii*, is tender like its parents and bears an inflorescence of pale blue-white flowers. PALTEC (Denis 1928) is an interesting hybrid of *I. tectorum* crossed with an old pallida called EDINA. OLIVER TWIST (Washington 1933) is a hybrid of *I. tectorum* × *I. cristata*. It resembles *I. tectorum* in form, but is smaller and lighter in color.

The Cyclus Section

The cultural difficulties presented by the *Oncocyclus*, the *Regelia* and the *Pseudoregelia* groups precluded their general use until certain hybrids combining them with tall bearded varieties brought some measure of their exotic beauty within the range of the average gardener. The present gar-

den hybrids have come mainly from the *Oncocyclus* species *I. gatesii*, *I. lortetii*, and *I. susiana*. The unusual coloring of these species is produced by deep colored veins and dots on a light ground. Usually there is a deep splotch of color in the center of the fall at the haft. In the hybrids this characteristic veining is sometimes lost and the color is smoothed out, but the huge rounded shape of the flowers is evident.

There are three groups of these hybrids on the market today. The first group comprises the descendants of the iris WILLIAM MOHR, from a cross by the late William Mohr of PARISIANA $\times$ *I. gatesii*. They usually occur in some shade of lavender and have lost the *oncocyclus* habit of carrying only one flower to a stalk. These hybrids respond to the same culture as ordinary tall bearded varieties and include the following: MOHRSON, GRACE MOHR, ORMOHR, ELMOHR, ORMACO, and ILLUSION.

The second group of hybrids have been termed "Oncobreds" by their originator, Mr. Clarence G. White, of Redlands, Calif., whose specialty is this Bearded $\times$ *Oncocyclus* type. These iris are usually smaller and less vigorous than the WILLIAM MOHR seedlings. Some of the more prominent varieties are SUSAN OF HILLY, NELSON OF HILLY, SOME LOVE, and OYEZ.

The last two are typical of the White seedlings. SOME LOVE is a small flower of delicate cinnamon pink markings on a white ground. OYEZ is one of the heavily marked type. Both are around 20 inches in height and bloom rather early.

The third group of these hybrids are derived from two old varieties, APHRODITE, which is also known by the name of Sylphide, and BEATRIX. APHRODITE was a hybrid of *I. gatesii* $\times$ *I. lortetii*, both *oncocyclus* species. BEATRIX is from the *Regelia* species KOROLKOWI VIOLACEA crossed with the *oncocyclus* *I. susiana*. Both APHRODITE and BEATRIX were introductions from the firm of C. G. van Tubergen. The modern varieties derived from these old hybrids include ARUNA, BALROUDOUR, GRAY CLOUD, STORMY DAWN, all of which are from the Sass Brothers of Omaha, Nebr., and the varieties MERMAID, PESHAWAR, COQUETRY, and TOUSSAINT L'OUVERTURE from Mr. Robert Schreiner of St. Paul, Minn.

When one realizes that the *Oncocyclus* species were natives of what is now Iran; the *Regelias*, named for the famous Dr. Regel, natives of the Caucasus and the north slopes of the western Himalayas, and that the *Pseudoregelias* came from the southern slopes to the east, it is apparent that in their culture sunlight and good drainage should not be overlooked. Also, they seem to prefer rather heavy clay soil. A resting period immediately after the flowering season is essential. The species themselves, or hybrids between the species, require lifting after the foliage has died down. They are stored in dry peat moss until late fall and then replanted. *I. hoogiana*, a *Regelia* species, is well worth this trouble. It is one of the bluest of all iris and has a wonderful smoothness of texture. FLORA, a deep-veined maroon colored hybrid, and LUNA, a white with widely spaced red-purple veins, must also be treated in the above manner. It is not necessary to lift the bearded-cyclus hybrids as they are like the bearded iris in their requirements.

The Apogon Section

Members of the Apogon or Beardless section of the iris family are natives of every continent in the Northern Hemisphere. While the species are more numerous than in any other section, they seem to be split up naturally into small, closely related subsections as follows:

The Siberica Sub-section
The Spuria Sub-section
The California Sub-section
The Hexagona Sub-section

In addition, there are various miscellaneous species, some of which have great garden value and which will be treated separately.

The Siberica Subsection

The modern hybrids representing this subsection are mainly descendents of *I. siberica*, which originally came from central Europe, and *I. orientalis* from Manchuria. They are excellent garden plants for the perennial border, require no special care, and will grow almost anywhere. They respond to good soil, however, and a liberal treatment of sheep manure or well-rotted cow manure is recommended. This should be thoroughly mixed with the soil before planting. Most modern hybrids are in various shades of blue and blue-lavender with white forms not uncommon, but recent efforts by hybridizers have evolved varieties in tones of near red. The clearest of these is ERIC THE RED, a new variety not yet on the market. Some of the better new sorts showing worthwhile development are as follows:

CAESAR'S BROTHER.	36 in.	Large black pansy purple.
COOL SPRING.	30 in.	Pearly blue on wide-branched stem.
GATINEAU.	24 in.	Clear medium blue.
HELEN ASTOR.	30 in.	Rosy red with white halo at throat.
MATANE.	30 in.	Milky white.
MOUNTAIN LAKE.	36 in.	Cool medium blue with ruffled falls.
RED EMPEROR.	30 in.	Wine red, veined blue.
SNOWCREST.	36 in.	White self. Tall.

Also from the Siberica group comes *I. chrysographes*, a species with grass-like foliage and deep red-violet flowers. This iris prefers moist, cool soil, rich in humus. Planting time is in early autumn. The only American representative of this group is *I. prismatica* which resembles a small Siberian on slender, wiry, crooked stems. In nature there are two colored forms, a light blue bicolor with blue style arms and a blue-lavender bicolor which has purplish style arms. This iris is very good for a sunny spot in the wild garden, and it prefers slightly acid soil. Transplanting is best attempted in early fall or spring, but is difficult at any time. The most satisfactory way to get a stand is to sow seeds in the fall, in the spot you wish the clump, and never move the seedlings. The seedlings will flower the second year and will persist indefinitely if left undisturbed. There is a pure white form of *I. prismatica* which is difficult to grow.

The Spuria Subsection

In the opinion of many, the most satisfactory garden iris of all are the hybrids from the Spuria group. They are not subject to disease. They do not suffer from crowding by other plants. Insects and pests leave them alone and they will bloom for years with little or no attention. Above all, when once established they will give a wealth of bloom every year, for they are very late in putting out their growth and do not winter-kill. Their best use is for tall, accent clumps for the rear of the border, and when blooming season is over the tall sword-like leaves are very attractive. The modern versions of this flower are mainly derived from *I. spuria* from western Europe and England, and *I. ochroleuca*, and *I. halophila*, one of the smaller spurias, which is native to the salt marshes of Central Asia. The following varieties which have been tested are found reliable:

AUREA.	Species. Golden yellow.
EUPHROSYNE.	40 in. Clear, bright blue with yellow signal.
FAIRY WAND.	Gold, tinted blue. Tall.
HAZY HILLS.	S. Deep blue. F. Blue and gold with bright signal.
LORD WOLSELY.	Violet self with yellow signal.
OCHROLEUCEA GIGANTEA.	60 in. White with large yellow signal.
SHELFORD GIANT.	70 in. White with orange signal.
SUNNY DAY.	36 in. Pure yellow self.

The California Subsection

Members of this group are confined to California and a few adjacent states, and for the most part are evergreen. There is a wide variation in the color of the flowers within the separate species, and though these iris are very beautiful, they are not widely grown. The reason for this is that the plants cannot be treated like other iris. The rhizomes are very slender and the root fibers are few in number. They cannot be moved when root growth is inactive, and transplanting should be done in early spring. The best method however, to obtain specimens of this group is to raise them from seeds, and if transplanting is necessary, lift the plant, dirt and all, without disturbing the root system. Carl Purdy, of Ukiah, Calif., lists seeds of the following species:

<i>I. Douglasiana.</i>	12 in. Cream colored flowers.
<i>I. bracteata.</i>	12 in. Golden yellow flowers.
<i>I. hartwegii.</i>	6 in. Soft yellow flowers.
<i>I. macrosiphon.</i>	10 in. Grassy foliage, blue flowers.
<i>I. purdyi.</i>	8 in. Yellow, purple veined flowers.
<i>I. tenax.</i>	3 in. Red-purple flowers.
<i>I. tenuissima.</i>	12 in. Soft blue flowers.
<i>I. Watsoniana.</i>	12 in. Light blue flowers.

These iris will grow best in semi-shade in a gritty soil, rich in leaf mold. It should be slightly acid and a light mulch is beneficial. Winter protection is advisable.

The Hexagona Subsection

There is a new race of very desirable garden plants that have sprung from three or possibly four native American species. These are the so-called Louisiana Hybrids. From the species *foliosa*, *fulva*, *hexagona*, and possibly *giganticaerulea*, there have come hybrids of every color in the rainbow. The first of these was the iris DOROTHEA K. WILLIAMSON from a cross of *I. fulva* $\times$ *I. foliosa*. Later from Mr. T. A. Washington, in Nashville, Tenn., came a series of hybrids from these same species in various shades of pink, red, lavender, and purple.

As the native iris in Louisiana began to receive more and more attention, natural hybrids in the above colors, as well as in yellow and white and in all shades and combinations therefrom, were discovered. A special strain of these hybrids with flowers not unlike Japanese iris has been found near Abbeville, La., and is now known as the Abbeville Strain. It is not uncommon for some specimen of these iris to attain a height of seven feet in their native swamps. Curious as it may seem, these natural hybrids are hardy, and with some winter protection can be grown as far north as Massachusetts. In Louisiana they are grown in sunken beds which have been enriched with well-rotted cow manure. These beds are flooded during the growing season. A modification of this practice is recommended for the northern sections where the soil is apt to be heavy and where the winter rains would only create ice in the beds. Any method whereby the beds can be flooded during growing season and later drained, would serve the same purpose.

Few of the native hybrids have found their way to the nurserymen, but the following are available:

KRAEMER TAN.	36 in.	Soft yellow-ton. Flowers appear at several joints in the stem.
KRAEMER YELLOW.	36 in.	Large flaring flowers of soft yellow. Four branches.
MARINGOUIN FULVA.	30 in.	A form of <i>I. fulva</i> found near Maringouin, La. Large and very deep in color.

Reliable varieties of the northern hybrids are:

COWETA.	30 in.	White, veined rosy-lavender.
DOROTHEA K. WILLIAMSON.	34 in.	Deep purple.
MARTHA WASHINGTON.	36 in.	Vinaceous old-rose.
SARA CHEEK.	36 in.	Clear salmon pink.
TASKONA.	24 in.	Light copper.
WENA GOODALL.	40 in.	Deep rose.

These Louisiana Hybrids are unsurpassed for use as cut flowers. As each blossom withers, it can be pinched off and new blossoms will open each day so that an arrangement will last for several days. It has been found advantageous to grow these iris in beds to themselves and outlined with something like a brick edging. They have a habit of wandering about and mixing themselves up for the rhizomes increase in length as they grow, so that the clump will spread in all directions from the center. This makes little difference when they bloom for the colors are quite harmonious.

Miscellaneous Beardless Iris

The best iris for growing in bogs or at the edge of a pool are *I. pseudacorus* and *I. versicolor*. *Pseudacorus* is a very vigorous plant with large yellow flowers and will thrive anywhere if it does not get too dry. It is a native of Central Europe. *Versicolor* is a native American species and is found in wet places from the Gulf of Mexico northward to Canada. It occurs in many shades of gray-blue with typical venation on the falls.

I. setosa, native to Alaska, Labrador, and the coast of Maine, is a very ornamental iris and occurs in many forms. It may be as tall as two feet or as dwarf as a few inches. The color varies from a light lavender-blue to a deep blue tinged with red.

I. verna is a delightful subject for the wild garden. This little dwarf is a native of the south from Virginia to Alabama. It grows in heavy acid soil and is most difficult to transplant. The bright lilac-blue flowers have a brilliant orange yellow signal patch which makes it resemble a small bearded iris. A white form called VERNAL SNOW is very rare.

Japanese Iris

The so-called Japanese iris are descendents of two species found in the vicinity of the Amur district of Manchuria. They are iris *I. Kaempferi* and *I. laevigata*. The present varieties of Japanese iris mainly descend from *I. Kaempferi*, and the Japanese hybridizers with their characteristic patience and skill have succeeded in evolving a flower in which the standards approach the shape and size of the falls. Consequently, the flower appears to be double. In the wild state there is a marked difference in growing conditions between *I. Kaempferi*, which is not really a bog plant and should be kept comparatively dry except in the spring when growth is active, and *I. laevigata* which is a true bog plant and flourishes where it is wet all the year. The best method for treating Japanese iris in the garden is to plant them in rich soil which is distinctly on the acid side. This can be enriched in the fall and winter with well-rotted barnyard manure. In the spring some method of flooding the beds is advisable. One way to do this is to have the paths slightly lower than the level of the beds and then the beds can be flooded from the bottom by simply turning the hose pipe into the paths.

Bearded Iris

Most of our garden iris come from the Pogon iris section of the iris family. The parent species of these iris grew, for the most part, in Europe and Asia. In nature the bearded iris existed as dwarf species, tall bearded species, and certain natural hybrids between the two. Many of these natural hybrids are in cultivation today. Blue *germanica*, *I. florentina*, *I. kochii* and *I. albicans* are well-known intermediate hybrids and are found growing in old southern gardens.

Our present dwarf iris varieties are mainly descendents of two species, *I. pumila* and *I. chamaeiris*. Both of these species are native to central and southern Europe. The culture of the dwarf bearded iris is very simple. Any well-drained situation in the garden will do. They will stay for years

in the same location and bloom profusely, although when the clump gets too thick it is a good idea to separate the rhizomes. They are ideal for the front of the border and for edgings and for rock gardens. In addition to the above hybrids, the species *I. flavissima*, otherwise known as *I. arenaria*, is grown in many gardens. This is a most unusual iris, only a few inches in height, and the flowers are bright yellow with a brilliant orange beard. The form is flaring and it will succeed well in rich, sandy loam. It is shallow rooted and needs an abundance of moisture in the spring. A list of dwarf bearded iris is as follows:

AUTUMN QUEEN.	Pure white.
ENDYMION. .	Rich claret.
TAMPA.	Deep red.
KEEPSAKE.	Yellow.
SOUND MONEY.	Yellow.
ATROVIOLACEA.	Deep red violet. Early.
DEEP WATER.	Pale blue.
LADDY BOY.	Deep blue.

The culture of tall bearded iris is covered in a subsequent article in this BULLETIN and therefore these remarks are concerned only with their derivation. The modern tall bearded iris is a hybrid many generations removed from the species. The first recorded crosses were by the French gardener Lemon around 1840, and involved *I. variegata* and *I. pallida*. Gradually it became apparent that other species would improve certain qualities of the flower, and the Asiatic species *I. trojana*, *I. mesopotamica*, *I. cypriana*, and *I. kashmiriana* were introduced into the picture as well as the natural hybrid AMAS.

The effect of these early combinations was manifold. The colors became blended by the use of *I. mesopotamica* and AMAS. Large flowers and tall stalks resulted. *I. trojana* is mainly responsible for the development of branching. Our whites and yellows are traceable to *I. cypriana*. Bad qualities came though with the good. Most of the Asiatic species are tender and are inclined to make much growth during the winter. This is noticeable in many modern iris, and this tenderness can be traced directly to these species.

The growth of iris hybridizing in the last quarter century has been amazing. Amateurs all over the world are raising hundreds of thousands of seedlings every year. This has resulted in a rapid advance in the production of new, clearer colors, and fine hardy plants. When we see these outstanding new varieties we should pause a moment and give a vote of thanks to those early collectors whose indefatigable efforts brought together the many species from the far corners of the globe, and also to those first hybridizers whose patience and determination made possible the iris family as it is today.

ON PURCHASING IRIS

JESSE WILLS

■ A YEAR AGO I wrote an article entitled "Older Iris I Would Buy Again," which was published in BULLETIN No. 89. In this I listed 30 tall bearded iris costing \$1 or less that I would buy again if I were starting my garden anew. I tried to diversify and balance this list according to color, and I gave as much emphasis to such garden values as vigor, hardiness, freedom from disease, and regularity of bloom as I did to color, form, substance, and branching of the individual flower and stalk.

My list was a purely personal one, based on experience in my own garden, and I was never entirely satisfied with it. Because I had arbitrarily limited myself to 30, I had to leave out many which I liked. Now that another year has passed, bringing more varieties down into the low-priced class, and now that I have had another season in which to observe and compare, I have decided to expand my list. As it appears now, at the end of this article, it includes 78 varieties. I did not know what the exact number was until after I had finished the list, since I did not try to squeeze my choices into any set figure.

This number of the BULLETIN is dedicated largely to new members who may easily become confused in buying iris. There are thousands of varieties of the tall bearded kinds in existence, and a good many new varieties are introduced each year. If Mr. or Mrs. New Member is so fortunate as to live close to a good collection, he or she can visit it in blooming season and make selections according to individual taste. Do this by all means if you have the opportunity. If this is not possible, it will be necessary to order sight unseen from a catalog which may list from 200 to 500 or more varieties, priced anywhere from 25c to \$25 or more. High prices represent novelty or scarcity value more than they do intrinsic worth. The originator or introducer thought the new iris was good, either an improvement in its color class or something distinctly different. If he had not thought so, it would not have been named and introduced. There are only a few roots in existence, however, and people who want the iris while it is still new must pay much more for it than they would if they were content to wait awhile. The actual price will vary according to the amount of stock and according to the dealer's judgment of how good the new iris is and

what the demand for it will be. It probably is good—it may be very fine—but on the other hand it can prove a disappointment and will disappear from the market in a few years. Even if it is a potential Dykes Medal winner the price will come down year by year as the stock in existence increases, and, as you will realize after growing them a few years, iris increase very rapidly. According to your desires and your pocketbook, you may buy now or wait two, three, or five years. Most beginners start with iris which cost \$1 or less, but if you should want to splurge on more expensive varieties, check up on the ones you are interested in by watching the varietal comments in the BULLETIN and by noting the awards they get and their rating or Symposium standing.

Buy from a reputable dealer, preferably an iris specialist, who will have a longer, better balanced, more representative list than the average commercial garden or nursery. A number of such iris specialists who are members of the Society advertise in the back pages of this BULLETIN. Their catalogs are very interesting. Ask for several of them and then divide your order among them. Some of these catalogs, in their descriptive lists, give such information about the flower as height, season of bloom, date of introduction, awards won, and some of them contain lists of “best” iris or groupings by color. Photographic illustrations have been cut down because of the war, and color plates have almost disappeared, but these will come back in improved form when conditions permit. Most dealers have a pleasant little habit of throwing in extras with an order, which makes every shipment a surprise package.

Remember one good rhizome will develop into a nice clump in two or three years, but three plants of one variety will give a more immediate effect in your iris bed or in your mixed perennial border. Remember it takes time for a new plant to become established. A certain percentage will not bloom the first year, and those that do may be off somewhat in height and size. Even so, your first blooming season will be a thrilling experience.

Occasionally even a good, well-established variety will have an off year, and sometimes a variety will not like a particular spot or a particular garden, but such instances are rare. Most iris do well in all sections of the country, except in places like Florida where there is no dormant period. Southern California, which has special growing conditions, is somewhat of an exception. Bearded iris grow magnificently there, but some (though not all) Southern California

varieties do not fare well in the East, and some (though not all) eastern varieties fail to perform at their best in Southern California. I have noted a few varieties as tender. This means not so much that the plants themselves are winter-killed but that they are apt to have the bloom killed, particularly in sections marked by alternate freezes and thaws. EASTER MORN does not do well in Nashville, but blooms beautifully on Staten Island, N. Y., and also does well in Atlanta and Texas. MOUNT WASHINGTON blooms well most years in Nashville, but is tender in Chicago. Many tender California varieties do splendidly in New England where the ground stays frozen all winter or can be kept so by a mulch.

The list of iris I am presenting lays no claim to be definitive. There are a great many fine ones not included. You yourself will be sure to find others that you will like. It is probably somewhat unbalanced because of personal taste. For instance, I don't particularly care for the heavily marked plicatas, although many people do. While it is a personal list, it has been checked with the selections of a number of other judges. I have included this time a few varieties which have not happened to do well with me, but which I know grow well in most gardens. In making up the list I also kept in mind availability. There are some varieties I like very much which are found in very few catalogs. I was forced to list a few that are not particularly well distributed, however, in order to fill out a color class which otherwise would not have much representation. The same reason has led me to include a very few varieties that probably will cost more than \$1 in 1944. The majority of the list will be priced from 25c to \$1, and most color classes will include examples of both extremes.

There are two other very helpful lists in this BULLETIN with which mine may be compared. One is Kenneth Smith's Symposium, which has been an annual feature for several years. It contains both high- and medium-priced varieties, all of which will be low- or medium-priced in a very few years. The other is a list of awards winners since the founding of the American Iris Society. One word of caution is needed about these. Occasionally an individual wants to collect all the Dykes Medal winners. This is all right if it is done as a historical collection, but if such a person expects all the Dykes Medal iris to be equally good, he will be disappointed. Iris have developed tremendously in the last ten years, and some varieties which deservedly won the Dykes or an Award of Merit in the past would not qualify now.

Now for a final word about the color classifications which I have used. Some varieties could equally well be classed in a different way since they represent border-line colors which blend or merge into each other. For instance, some of the deep blues and violets could be just as well classed as purple. Lately breeders have been blending tan, orange, apricot, and pink with other colors with the result that the light reds, coppers, yellow-pinks, and yellow blends merge into each other and can be classified in several ways. Here is the list:

White Selfs

There are a great many fine white iris, and there are more coming. Some of these are pure white, some have a faint blue cast which gives them a cool effect, and some have a yellow haft or beard, or a creaminess, that makes them warm whites.

1. GUDRUN. Criticized for having too short a stalk for so large a flower, but visitors in your garden will like a clump of it.
2. CRYSTAL BEAUTY. Good for background planting because of its height. Very hardy.
3. CATHEDRAL DOME. Very fine in every respect, and I like it best of Mrs. Nesmith's whites.
4. WHITE GODDESS. Also from Mrs. Nesmith, and preferred by some people. It is found in some catalogs that do not list No. 3.
5. SNOWKING. Has not done especially well for me, but is fine in most places. Particularly well liked in the Midwest and in New England.
6. MATTERHORN. The same remarks apply to this as do to No. 5.
7. MOUNT WASHINGTON. A magnificent flower on a rather high-branched stalk. A little tender in some sections.
8. SIERRA SNOW. Not so well known as some of the others, but very fine. Also hardy and late.
9. MOUNT CLOUD. One Southern California iris that seems hardy everywhere and can always be depended upon for a good show.
10. MARY E. NICHOLLS. Between a white and a cream, with an enameled yellow haft. Not large, but a trim, beautiful flower.
11. EASTER MORN. Very tender in some places, but very fine where it can be grown.

Blue Plicatas

Plicatas, which means iris that have one color stitched or stippled on top of another, are usually grouped together. I think it better to put those with a white or blue effect in between the whites or blues; and those giving a yellow or tan effect, with the yellows and yellow blends.

12. LOS ANGELES. An older iris which is as fine as most modern ones. The blue markings are very light, so that the garden effect is white.
13. SAN FRANCISCO. This sister seedling is more heavily marked blue. It is inclined to be tender in some places.

Amoenas

These have white, or nearly white, standards, contrasting with darker falls.

14. WABASH. The best of its class; very fine and striking.
15. SHAH JEHAN. Not a pure amoena since the standards are not a pure white, but it fits better here than anywhere else. It is beautiful and worth while.

Light Blues

16. SHINING WATERS. Good but inclined to be tender.
17. CASTALIA. A fine light blue which was not sufficiently appreciated when it first came out. It is hardy and very dependable.
18. GLORIOLE. A very pale frosty blue, hardy and dependable, but a little slow in getting established.
19. ANITRA. Slightly paler than SHINING WATERS, and hardy.
20. GREAT LAKES. Tops in the light blue class. Slightly deeper in color than some of the others, and a magnificent plant and flower in every respect.

Medium Blues

21. SIERRA BLUE. Because it grows so tall and has such large flowers, you may have to stake it, but it is worth while just the same.
22. MISSOURI. Also very good, not quite as tall and big so that it better resists the weather.
23. NARAIN. Slightly taller and richer than the other two.

Blue Bicolor

24. AMIGO. Here is a vivid contrast between the light blue standards and the rich, dark falls. Low growing, but very worth while. There are not many low-priced ones now in this color

class, but there are some new ones coming on which are taller than AMIGO.

Deep Blue and Violet

These divide into two groups: those whose falls are like velvet, which are slightly bicolor in effect because of the difference in texture in the standard and in the fall; and the satiny ones without velvet which are almost absolute selfs.

Velvety

25. BLACK WINGS. Old and low-growing, but good for foreground effect because of its rich, dark color.
26. WINNESHIEK. A good one which has been overlooked to some extent. Distinctive because it has a lighter edging to the falls.
27. BLUE PETER. Makes a fine clump and is dependable.
28. SABLE. A very fine new one which is just getting down to the low-price class.

Satiny

29. BRUNHILDE. Very fine at its best, but occasionally does not grow well.
30. THE BISHOP. Almost as good, and a little more dependable.

Mauve and Gray-Lavender

These iris have colors which are mostly soft and not vivid, and need to be seen close up to be appreciated.

31. PERSIA. A smoky blend of gray and lavender which needs to be seen in a good size clump to be appreciated.
32. OZONE. Described well in one catalog as dove-lavender with chestnut markings. Good form, well branched, good substance.
33. ORMOHR. A big, tall gray-lavender with veinings of deeper violet. One of a number of seedlings from the hybrid WILLIAM MOHR which more or less resemble it in the veining but are taller and better growers.
34. VIOLET CROWN. A light or medium violet self which makes a good garden clump, and which almost belongs in the purple class below.

Purple

35. INDIAN HILLS. A rich, bright purple that is fine for planting with bright yellows or oranges like NARANJA.
36. EDNA HICKS. A blended, slightly bicolor, purple that is not well distributed, but which has been very fine with me.

Brown, Purple, and Bronze

I don't particularly like this class since the colors are apt to be dull. They are apt to be purplish-brown or bronze, or a subdued brown-red. The two listed below are good iris, however.

37. LOUVOIS. Not tall, but makes a rather attractive clump. Standards light brown, falls dark red with a brown edge.

38. DÉPUTÉ NOMBLOT. A tall, vigorous iris with fine substance and branching. Color is subdued bronze to purple-red.

Red Selfs

39. THE RED DOUGLAS. A dark red-purple, which is good in every way except that it is not so red as the name might imply.

40. CHRISTABEL. One of the finest red iris at any price. Neither a purple-red nor a copper-red, but in between.

41. JUNALUSKA. Red and rose all lighted up with a glow of copper and gold, giving a bright effect.

42. RED BONNET. Not so well known as the others and not especially tall, but a very fine dark red flower.

Red and Copper Bicolors

This is one of the color groups that tends to merge in with others. Some of them with copper-gold standards and copper-red falls could be almost as well classed as blended variegatas.

43. CHEERIO. An older one which has held up. The standards are dull gold, slightly flushed rose, the falls are deep glowing red. It is a good grower and has a fine tall stalk.

44. RADIANT. The standards are bright bronze-gold. The falls are an intense terra cotta red. It is very brilliant in the garden, although it is not large nor tall.

45. SONNY BOY. Similar in color effect to RADIANT. A little larger and with colors perhaps a little more blended.

46. PORTLAND. This might just as well be put in the next color group, except that it is a bicolor, with standards blended gold and falls a soft, smooth rose. It makes a lovely clump.

Light Red and Rose

47. LIGHTHOUSE. This also makes a fine clump which is good every year. It is a coppery-red or rose self with a golden glow in the center of the flower.

48. MONADNOCK. A light rose-red, that is, with some purple in it, which is so vivid that it carries clear across the garden. Tall and late.

49. DUBROVNIK. A blend of rose-pink and gold, with a flush of lavender in the falls. Very colorful.

Orchid and Lilac-Pinks

This is an old color class; in fact, all the first so-called "pinks" were of this type. There have not been many good new ones since breeders are working for other types of pink. Some of them also tend to have floppy flowers lacking in substance.

50. FRIEDA MOHR. This is an old flower which still stands up and which is still fine. It has a medium depth of tone and is sometimes classed as a medium pink or deep pink. The color, however, is distinctly on the lavender or lilac side.
51. BALLET GIRL. A very pale orchid-pink, which has not happened to do well with me but which is well liked in most sections.
52. IMPERIAL BLUSH. This is very similar, a trifle deeper in color, and has also been popular.
53. SPRING IDYLL. This is a newer one which I like very much, although it has not been tested in many places. It is a milk-white, flushed orchid-pink at the tip of the standards and the base of the falls. It makes an attractive clump and ladies particularly seem to like it.

Yellow and Blended-Pinks

These are entirely different in color effect from the orchid-pinks. They come closer to true pink or salmon-pink, as the color is blended with yellow. Breeders have been working a great deal in this class and great improvements are being made.

54. ANGELUS. This is a big, broad flower of fine substance, on a stalk which is not particularly tall. It is a little more lavender than the others, but has a pleasing pearly effect. It is rather late.
55. CHINA MAID. This is a taller iris of soft lilac and bronze, which has a suggestion of salmon about it. It is tender in some places.
56. MOROCCO ROSE. Another tall one which is hardy. Rose-pink rather than salmon in effect.
57. SANDIA. This is an excellent iris which was slow in winning the recognition it deserved. It is a smoky pink tending toward salmon, and is a very dependable grower and bloomer.
58. AUBANEL. When seen in a clump this is, to me, the pinkest in color effect of the group, although the flower and stalk are

not so near perfection as some of the others. It is a fine garden flower.

59. AT DAWNING. This is a distinct bicolor with pearly standards blended with pink and bright rose falls. It also makes a good garden clump. Blooms early.

Tan and Apricot Blends

These are usually classed as yellow blends, but the name is apt to be confusing because yellow is not the dominant color in many of them. They may be apricot, tan, deep old gold, rich golden brown, or even terra cotta, or a mixture of all these with salmon and rose blended in. They give the same color effects as the bronze chrysanthemums. It is a comparatively new color class, with many fine new ones appearing in it. In some of the other color groups there are older iris which are just about as good as the latest, but this is unfortunately not true of these as yet. Since there is such a difference between the really low-priced ones and the newest, I have stretched my limit a little and included two which will probably cost more than \$1 in 1944.

60. JEAN CAYEUX. A smooth, brown self, almost coffee colored. It has a good flower and stalk, and, when seen in the right light, can be attractive. At other times it can also look rather dirty and unattractive.
61. GLEN ELLEN. A big, tall tan self that is cool and soft in effect, but which nevertheless shows up well in the garden. It is a good grower.
62. BUCKSKIN. Another very large, tall tan that is appropriately named.
63. GOLDEN AMBER. The first three listed of this class are all tan or brown. This one is much brighter in effect, and the name describes it very well. It is not a particularly large flower, but because of its bright color and good growing habits, it should have been better distributed than it is.
64. STARDOM. This is still somewhat higher priced, but is very worth while. It is a color hard to describe, since it is a blend of copper, pink, apricot, and terra cotta. It seems to do well everywhere.
65. SUNSET TAN. This also may not yet be in the \$1 class. It is a good new iris which deserves more recognition than it received; a tall, vigorous grower, with a bright flower of golden brown carrying an undertone of rose.

Yellow Plicatas

These have a cream, or yellow, or pale buff background stitched over with deeper brown or purple. The lightly marked ones give a yellow effect in the garden, and the more heavily marked ones, a brown effect.

66. ROYAL COACH. This is not so large and has not attracted so much attention as some of the others, but I like it for its garden effect of yellow. I also like it close up because it is not so heavily marked as some of the others.
67. ORLOFF. This is an unusual, heavily marked flower. It is like deep cream almost covered with nutmeg or cinnamon.
68. TIFFANY. This is a taller, larger flower which is soft yellow in color with fairly heavy stitchings of reddish-lavender.

Orange-Yellow Selfs

69. NARANJA. This is not really orange in color, but is a good deep yellow with orange-brown shadings on the falls. It makes a fine garden companion for a purple like INDIAN HILLS. It is a very dependable grower.
70. PRINCE OF ORANGE. This is newer, and to me it is the best of NARANJA'S seedlings yet introduced. It is similar to NARANJA, but has better form and color. Since it is rather new, I am not quite sure of its dependability. It has done well for me and has been liked in many other places, but a few judges have rated it low on performance.

Yellow Selfs

There is now a wide range of choice among many fine iris in this color class.

71. CALIFORNIA GOLD. This is beginning to be an older iris, but it still makes a very bright clump. It is a bright, deep, glittering yellow, and is a very dependable grower.
72. SONG OF GOLD. This is a soft, light yellow of moderate height on a finely branched stalk. It was somewhat overlooked at first, but has won more and more recognition. It is almost the only yellow with flaring falls.
73. GOLDEN MAJESTY. Many people consider this the best all-round yellow at a moderate price. It is a deep yellow with a hint of orange, not so hard in its color as CALIFORNIA GOLD. It shows signs of tenderness at times, but rarely fails to bloom.
74. FAIR ELAINE. This is another fine light yellow, which is bi-

color since the standards are nearly cream while the falls are a bright medium yellow. Has fine form on a tall, well-branched stalk, and seems to grow well everywhere.

Creams

75. GOLDEN TREASURE. This is usually classed as a cream but is really a mixture of cream and bright golden yellow which lights up the whole center of the flower. It is always outstanding in a garden because of its brilliance.
76. SNOQUALMIE. This is a cream self, deep cream all over with no marked contrast even in the beard. It is a fine iris, but it must be used as a foil for other colors rather than as an accent in itself.

Variegatas

This is the name of a very old color class. A typical variegata has bright clear yellow standards sharply contrasting with purple, red, or chestnut red falls which usually, but not always, are edged with the same yellow of the standards. The color combination is rather hard, although it is bright. Variegatas are best planted by themselves.

77. CITY OF LINCOLN. This is the best of all the variegatas in the price range we are considering. It is a tall flower on a good stalk. It is very dependable in bloom and growing habits.
78. FRANK ADAMS. This is usually classed with the variegatas, so I put it here, but it is not typical. The standards are a soft maize-yellow, and the falls are soft rose-red. The color, to me, is just a trifle dull, but the variety is outstanding for size, form, substance, height, and branching, and is also a very dependable grower.

"Best" Iris for Southern California

■ I APPRECIATE Mr. Wills' suggestion that other regions add a supplementary list of iris to those suggested in his article in this issue as I think it is at last recognized and admitted that all varieties do not grow equally well in all locations, that there can be no such thing as a list of best iris for the whole United States. In my additions to Mr. Wills' list, I adhere to his plan of mentioning only inexpensive varieties.

White Selfs

We, in Southern California, do not need to grow GUDRUN; we

have so many fine, tall and large white iris on well-branched stalks that GUDRUN looks poor and out of place. The white iris in Mr. Wills' list that perform best for us are MOUNT WASHINGTON, SIERRA SNOW, MOUNT CLOUD and EASTER MORN. For this region one more should be added.

PURISSIMA. This lovely tender white is indispensable because of its earliness. Tall, well branched, large flowers.

Blue Plicatas

FLORENTINE. In addition to Mr. Wills' list, I suggest this iris that is being grown satisfactorily in at least three gardens in different parts of this region.

Amoenas

DOROTHY DIETZ. Why not include Dorothy among the amoenas? There are so few and it does quite well.

Light Blues

GLORIOLE is definitely poor in California, and ANITRA, because of the dark veining over white in the haft which it develops here, is not nearly so attractive as a dozen others. GREAT LAKES is glorious in Oregon, but I have yet to see it grow tall in Southern California. Beautiful blues and whites come easily from the Mesopotamica strains grown here, so there is a wealth of material from which to make selection—much of it, probably, tender. In addition to SHINING WATERS, the following light blues perform well:

EARLY MASS

PALE MOONLIGHT

ALINE

EXCLUSIVE

FAIR ENOUGH. There is no iris that gives more flowers in a year than FAIR ENOUGH, and they are beautiful flowers on fine, tall stalks, but it is tender.

Deep Blue and Violet

Velvety

ACROPOLIS. For this climate it has not been superseded. Slightly bicolor, velvety texture, tall, well-branched, dependable.

ROYAL SALUTE. Another old variety but still worthy of a place in all gardens.

Purple

MISS CALIFORNIA. A free-blooming, large, tall, light purple that has great garden value.

TENAYA. Belongs in here somewhere. It is still one of the best of the red-purples.

Reds

MAUNA LOA. Like the others, this is a purple-red; tall, large flowers and early. It is needed in all gardens where it can be grown.

INCOGNITO. A fine, tall, purple-red self.

Orchid-Pinks

SAN GABRIEL. Although more than 20 years old, there is nothing to compare with it in this color for this region. It grows five feet or more tall, with perfect branching and large graceful flowers. It is very early.

Yellow

Mr. Wills' yellows are well selected, but I would like to add two that are different.

TREASURE ISLAND. A bright, clear yellow with ruffled flaring falls. There is a blaze of white in the center of the falls which, with the bright lemon-yellow surrounding it, makes this flower distinct.

SUNGOLD. A large, smooth yellow that should be grown here because of its earliness.

Tan and Apricot Blends

COPPER CASCADE. A rich mixture of copper and gold on a firm, beautifully formed flower. I believe this would be hardy anywhere.

Not all of my additions are tender, but many of them are. One rarely sees any of the seasonal intermediates in this region because of the tall, large pogon iris that bloom early. SAN GABRIEL, PURISSIMA, SUNGOLD, MAUNA LOA, and FAIR ENOUGH are some of the varieties that regularly have the urge to come into bloom early, and often start blooming in February. Naturally, these are for a mild climate.

—LENA LOTHIOP.

San Bernardino, Calif.

POINTS FOR THE BEGINNER ON BEARDED IRIS CULTURE

F. W. CASSEBEER

■ IT HAS often been said that bearded iris are among the easiest plants to grow. This is literally true, for given a sunny, well-drained spot, they will thrive almost anywhere. No doubt this is the reason why bearded iris are more extensively grown than any other types of iris.

While these iris require very little care, nevertheless there is a very perceptible response to good culture. It is with this in mind that the following notes are written.

Soil

Almost any good garden loam that is about neutral in reaction will suffice for growing bearded iris. All that is really needed is a well-drained location exposed to full sunlight. If the soil is exceptionally heavy or clayey, sand can be added to good advantage to lighten it. Do not lime the ground with alkaline agricultural lime as this will have a tendency to induce disease. If the soil is definitely acid, use crushed limestone (calcium carbonate) to counteract the condition.

Planting

While bearded iris can be used with good effect with other flowers in a mixed border, they will do best in beds devoted to iris alone since the rhizomes do not like to be smothered by the foliage of other plants. They can be successfully moved and replanted at almost any season of the year, but by far the best time for doing this is in the latter part of July or during the early part of August. It is then that the rhizomes are fully matured and will suffer but little set-back from this operation.

It is not necessary to purchase many rhizomes of one variety since with good care a single one will develop into a magnificent clump in two or three years. Hence fanciers usually prefer to buy one rhizome of a high-priced new variety and spread their purchases to include as many new iris as their budgets will permit.

Those rhizomes should be planted three feet apart in order to allow plenty of room between varieties as nothing is quite so messy



F. W. Cassebeer

Top—Typical iris clump early in the spring with old, withered foliage from the previous year. Bottom—Same clump after spring “house cleaning.”



F. W. Cassebeer

Circling the clump with a light application of fertilizer to insure better flowers and bigger rhizomes.

in appearance as the stalks of one iris mixing helter-skelter with their nearest neighbor by reason of the fact that they are planted too close together. To plant, dig a hole deep enough to accommodate the fibrous roots at the base of the rhizome, and cover with soil so that the top of the rhizome is just below the surface. Contrary to popular notion, never set the rhizomes on top of the soil like so many ducks on a pond.

After several years, when the clumps have become large and thickly matted, it will be necessary to divide them in order to main-

tain strong, healthy bloom. It is advisable to dig up the entire clump, wash the soil off with a hose, and with a sharp knife divide into sections, preferably each consisting of a single rhizome. The foliage should then be trimmed back fan-shaped to within five or six inches of the top of the rhizome to prevent excessive evaporation of moisture on the leaf surface during the period in which the plant is re-establishing itself.

It is well to bear in mind that five to seven rhizomes of a variety, if placed in a circular or oval group, will make a very sizable clump, so plant the rhizomes five to eight inches apart, and make sure that the fans all face in the same direction. If more or less permanent mass plantings are desired with a great many rhizomes, they can be spaced somewhat wider apart. Newly planted bearded iris should be kept watered during dry spells until the plants begin to grow again, which usually takes about a month.

Diseases

In general, bearded iris are not readily attacked by disease. However, since some do occur, they should be mentioned here. The four principal ones are commonly known as bacterial root rot, leaf spot, mustard seed fungus, and red fire.

The most troublesome of these is the bacterial root rot, which at-



When separating iris, dig up the entire clump, making sure to leave the small roots intact. Shake soil off the roots before cutting rhizomes apart.

F. W. Cassebeer

tacks the rhizomes. It is characterized by soft, foul-smelling decay of the rhizome generally caused by some external injury or by the iris borer. It most often occurs where the fan of the leaves joins the rhizomes, and in the garden it is usually first noticed when the fan of leaves begins to fall over even though the leaves themselves still look healthy. Upon investigating this condition, one usually finds that portions of the rhizomes are soft and mushy. These places can often be cut away and the remaining part of the rhizome dusted with sulfur or copper carbonate (Cupro-Jabonite). If a clump is seriously affected, there is nothing to do but to dig it up and separate the healthy rhizomes from the diseased ones and then replant those which are still in good condition. Be sure to put in fresh soil if they are replanted in the same spot. This bacterial root rot most often occurs during hot, wet weather in the summer and sometimes in the spring when the embryo bloom stalk is damaged by winter injury and rots away.

Leaf spot appears as a sort of running sore on the leaves, with subsequent spotting and browning of the foliage. It does not seriously affect the plant, but makes it unsightly. Wherever possible, remove the affected foliage by pulling it off the plant or cutting it off below the infected area. Leaf spot occurs most often in old, crowded clumps of iris, which should be separated. It is seldom found in a recently planted bed.

Mustard seed fungus sometimes is found in matted clumps early in summer and consists of rotting of the base of the leaves at the point of contact with the soil, with a consequent loss of part or all of the foliage. When this occurs, tiny fungus growths, in appearance like the mustard seed, will be found on the ground near the base of the leaves. It usually can be eliminated by pushing some of the earth away from the rhizomes and scraping the soft portions at the base of the leaves, followed by a dusting of sulfur at these points.

Red fire is a systemic disease that occurs but rarely. It is characterized by the leaves turning a rusty red in a portion of the clump. Ordinarily, all connected rhizomes within a clump are affected. Upon examining an affected rhizome, it will be found that the new roots have failed to form, resulting in starvation for the leaves. The only thing to do is to dig up the rhizomes with the red leaves and discard them. This disease occurs infrequently and is not likely to present a problem.



A single clump divided into individual or double rhizomes ready for replanting.

Photos by F. W. Cassebeer

Dig a shallow hole deep enough to accommodate the rhizomes and spread-out roots.



Fill in with soil so that the tops of the rhizomes are just covered; then firm the roots.



F. W. Cassebeer

Replanting single and double rhizomes to form a large clump of one variety. Be sure to water after replanting.

Insects

There is only one insect pest of any consequence affecting bearded iris, and that is the iris borer. This is the larva of a moth which deposits its eggs on the iris foliage or on nearby plants late in the fall, hatches out in the spring, pierces the young leaves of the iris, feeds on them, and gradually works its way into the rhizome proper. The presence of the borer can be readily detected in the spring by the zig-zag injury at the edge of the inside leaves. There is a slimy exudation from the injured area. Ordinarily, the leaves can be pulled aside slightly and the young borer extracted on the point of a knife. Another remedy is to cut the leaves off at a point below which the borer is working. A third method is to squeeze the foliage between the fingers, working from the base toward the tip, but this is not so certain to kill the borer as either of the other two methods. If the borer is allowed to proceed unmolested, he will work into the rhizome some time in June and gorge himself with the contents. By the time it develops its cocoon, it may well be as much as two



F. W. Cassebeer and K. D. Smith

Top—Prostrate leaves as result of rotting at the base due to mustard seed fungus. Bottom—Bacterial root rot has destroyed this rhizome.



F. W. Cassebeer and K. D. Smith

Top—Excelsior used as a winter covering on newly planted iris. Bottom—Iris which have “heaved” and lost their flower stalks due to inadequate winter protection.

inches in size. The inroads of the borer could often be completely prevented by removing old withered foliage and dusting the new leaves fairly early in the spring with compounds containing Rotenone or arsenicals.

Culture

The actual culture of the bearded iris is simple and does not require a great deal of time. In early spring as soon as the ground becomes workable, the old withered leaves of the previous season should be pulled off the clumps and the rhizomes that are found to be "heaved" should be pushed down and the earth firmed around them. The next step, either then or somewhat later, is the application of a light dressing of any well-balanced garden fertilizer sprinkled around the clump and worked into the ground.

The only care needed from then until blooming is shallow cultivation of the soil to keep down weeds and give the beds a nice presentable appearance. As soon as possible after flowering, the entire bloom stalk should be removed, cutting it off flush with the top of the rhizome. This will allow light and air to penetrate into the clump and will do much to maintain it in a healthy condition. After replanting the rhizomes, be sure not to let them dry out during the period when the plants are re-establishing themselves. Vigorous fall growth can be expected during September and October.

All newly planted iris beds should be given light protection for the first winter. Excelsior, salt hay, or leaves are all suitable for this purpose. Of the three, excelsior is to be preferred inasmuch as it is light and airy and is not likely to choke the plant with the possible result of the rotting out of the new bloom stalk the following spring. The best time to put on the protecting mulch is when the ground first becomes solidly frozen. This will do much to prevent excessive heaving during winter thaws.

IRIS HYBRIDIZING

KENNETH D. SMITH

■ ONLY A generation or two ago there were comparatively few iris hybridizers and not so many varieties of tall bearded iris. Those pioneer hybridizers have earned the credit for the modern iris in all its glory, but so involved became the pedigrees of those iris that haphazard crosses by amateurs often resulted in the production of outstanding award iris. Today iris hybridizing has become a fascinating hobby and people in all walks of life have taken to it with much enthusiasm. These hobbyists are now the originators of the majority of the new creations, and this article on the mechanics of breeding is written for those amateurs who do not know how it is done.

Selection of Parents

Tall bearded iris, because of involved pedigrees, never come true from seed. On the other hand, increases from the mother rhizome are always true. New varieties are created only by hybridizing, but usually 99 per cent of those seedlings are inferior to both parents. Once a seedling has bloomed, its color, form, and type of flower are fixed, and all increases from that mother rhizome will be similar. For that reason selection of parents is of the utmost importance, and points that should be considered are:

The stalk should be sturdy enough to support the bloom without staking. Branching should be open so that the bloom is properly displayed because if it is close, the bloom will be bunched against the stalk. Flowers should be of good form and proportion; open standards or tucked-in falls are bad and should be avoided. Flowers should also have stamina so that they will withstand sun, wind, and rain. Venation markings (lines or streaks of a contrasting color) at the haft of the flower usually are confusing and objectionable.

Process of Pollination

The entire stamen or anther is removed with a pair of tweezers. In applying the pollen, the anther is held by the tweezers and the pollen surface drawn across the lip of the stigma (see illustrations). It is best to fertilize all three stigmas, although some authorities state that only one is necessary. In bearded iris the chance of natural fertilization is slight so it is not necessary to bag the pollenized flower.



K. D. Smith

Transferring the pollen by rubbing the anther of one iris on the stigma of another. The stigma is found under the crest. The lip or stigma is made accessible by holding the crest back with the thumb and forefinger.

Time of Pollination

When the flower first unfolds, the stigmatic lip is tight against the crest, but in the fully opened flower it curls down and forms a shelf ready to receive the pollen. As the flower starts to unfold in

the early evening, the following morning is an ideal time for crossing. A bright day should be chosen, for moist pollen is not very potent and not many crosses are successful when made on damp or rainy days.

Tagging and Record of Crosses

Every serious hybridizer keeps a stud book in which is kept a record of all crosses made. The correct procedure is to record the name of the seed parent first and the pollen parent second so that a typical entry would be

“CROSS 1. 5/25/43 CAROLINE BURR $\times$ FAIRY LUSTRE”

The record thus shows that pollen from FAIRY LUSTRE was used to make a cross on CAROLINE BURR.

The pollenized flower must also be tagged; on this tag it is necessary to write only the number of the cross, but it must be well written, otherwise the rain will wash the number away.

Harvesting of Seeds

If the cross has taken, the ovary will begin to swell a few days after pollination and in approximately three months' time the seed pods will be ready for harvesting. By this time the pods will have turned brown and the ends will have started to split open. If left on the stalks, the seeds will spill out and be lost, so the pods with their accompanying tags are cut and placed in a safe place to dry. The ideal place is the floor of an unused sunny room or attic, but for those lacking that necessary space, the pods should be placed in separate small paper bags with ends open and stacked together in a box. This drying process usually takes two to three weeks, and then the seeds are removed from the pods and placed in small envelopes upon which has been written the number of the cross. They are now ready to plant. Sometimes in drying, due to lack of circulation of air, the seeds will mold, but this has no effect on their germination.

Garden Labels and Records

No matter where the seeds are planted, it is necessary that some sort of a marker be prepared to identify them. After much experimentation I have found the most satisfactory to be a 12-inch garden stake upon which has been painted the number of the cross and also the parentage. The latter is of great help at blooming time, for then it is not necessary to consult the stud book continually for the parentages of the crosses. It is also advisable to plot out in the stud book the layout of the seed bed and seedling

patch to show exactly where each cross is planted, for markers have a habit of heaving out during the winter months and often are misplaced or lost.

Planting of Seeds

Seeds are planted approximately one-half inch in depth in pots, flats, cold frames, or the open ground, but no matter where they are planted, the soil must be properly prepared. The important thing to remember is that the soil must be light and well drained; otherwise, root growth will not develop. I have always incorporated into my seed bed a generous amount of peat moss together with bone meal and gypsum (land plaster).

Planting in Pots and Frames

This method is satisfactory where only one or two crosses are made. Root growth naturally is restricted.

Planting in the Open Ground

Seeds should be planted as late as possible to avoid fall germination, for then the seedlings are likely to be heaved out during the winter and die. This type of planting is quite satisfactory, but it will not yield the high percentage of bloom within two years in the New York area such as results from cold frame planting. For those who have land to spare and do not want to be bothered with transplanting, I recommend planting the seeds in fields and leaving the plants undisturbed until they have bloomed. Naturally, this requires a great deal of space, for the seeds should be planted at least one foot apart, with the rows three feet apart. The disadvantage of this method is that less than 50 per cent will bloom two years from seed.

Planting in Cold Frames

This is the most satisfactory of all and yields the highest percentage of bloom two years from seed. If there are moles on your ground, it is advisable to place wire at the bottom of the frame before the properly prepared soil is added. Seeds are planted in rows about one-half inch apart with at least three inches between rows to allow for growth. After planting, the soil may be mulched with sand, sani-soil or some other material, which will do away with the green mold which usually appears on seed beds. I have found that if the seeds are planted immediately after harvesting (some may still not be cured) germination takes place very rapidly, and that many are up before winter sets in. Before freezing weather occurs, the frames are covered with their glass sash, and as the

ground in the frames does not freeze in the New York City area, root growth continues during the winter. Seeds that did not germinate during the fall will start germination in late February, with the result that in early June the majority of the seedlings are one foot or more in height with rhizomes the size of a finger nail. If transplanted not later than the end of June, 90 per cent or more will bloom the following year. Root growth on all of these seedlings is phenomenal, and that is the secret of success.

However, if seeds are not planted until late October or November, there will be no germination until early March even if the frames are covered with sash. Naturally, root growth of these seedlings will not be so far advanced, and even if transplanted in early July, it cannot be expected that the following spring will bring the high percentage of bloom secured when the seeds are planted in August.

Transplanting

Seedlings should be at least 8 to 12 inches in height. They are fanned and planted in rows at least 8 to 12 inches apart. Rows should have sufficient space between them so that it is possible to walk up and down to view the seedlings when in bloom. The garden stake identifying the cross should be transferred to the seedling bed with the seedlings. Small seedlings an inch or two in height have little chance of survival when transplanted in open fields, especially in a dry season, but in the northern part of the country where the growing season is comparatively short, certain hybridizers have had excellent results with transplanting small seedlings in early May.

Those hybridizers who soak their seedlings in a solution of Plant Shoot for 30 or 40 minutes before transplanting have found that these seedlings take hold immediately, for they suffer very little shock in the transplanting.

Hints for the Blooming Season

As seedlings bloom, especially if large numbers are planted, the inferior ones should immediately be pulled out and discarded. Those which show promise should be numbered such as "No. 43-1," "No. 43-2," etc., and the stud book should carry a record of these numbers and also show the parentage, height, number of branches, type of branching, color, shape, and size of bloom as well as the number of buds. If hybridizing is done in a serious way it is of the utmost importance to own a copy of Ridgway's *Color Standards*



K. D. Smith

A good stand of young seedlings in a coldframe.

and *Color Nomenclature* so that an accurate description of the color may be made. Those more serious minded should also take Kodachromes of promising seedlings, and while the color may not be absolutely true, the slide is a good record for future reference.

Discarded inferior seedlings should under no circumstances be given away because it will be lowering instead of raising the standard of iris grown in your community. The easiest means of disposal is to throw them in a pit in an unused corner of the garden. However, all hybridizers will produce some seedlings that are not good enough to name nor bad enough to throw away; these seedlings may be given away to friends to use for mass effect or presented to civic organizations to use for roadside plantings. The latter has been so extensively done at Nashville, Tenn., that that city has earned the nickname of the "Iris City."

Transplanting and Judging of Numbered Seedlings

These should be dug as clumps (dividing will set them back and not give representative bloom the following year) in early July and planted in trial beds at least three feet apart. Thus they may be viewed the following year as clumps with three to five bloom stalks

and judged accordingly. This judging and selection of seedlings is the most important part of iris breeding. Amateur hybridizers will usually be very poor selectors unless they have a collection of the newest introductions growing in their gardens for comparison, and even then they may select the wrong seedlings.

If a few seedlings are found to be outstanding and superior to iris in commerce, they may then be named and registered with the Registrar of the American Iris Society. As there are approximately 20,000 named iris, each hybridizer should own a copy of the *Check List* of the A. I. S. to avoid unnecessary correspondence with the Registrar in the selection of names.

The name selected should, if possible, be descriptive of the iris. It may describe its coloring or give a suggestion of its color. It may even be named in honor of some friend or relative. Mythology and history have also furnished many excellent names, but the important thing to remember is that the name selected should be euphonious and pronounceable.

Advice to Hybridizers

I heartily agree with Prof. S. B. Mitchell's closing statements in his article in BULLETIN No. 23, April, 1927, entitled "The Future of Iris Breeding," where he says, "In closing, let me say that I do not wish to discourage any amateur from raising seedlings for such fun as he gets out of it, but I depreciate his introductions unless he is willing to gather together a collection of the best and often most expensive new varieties for comparison or to do such traveling in iris time as will enable him to see them in other gardens—either one is a real matter of expense to the breeder." But all hobbies are expensive!

IRIS COLOR COMBINATIONS

MRS. SILAS B. WATERS

■ COLOR is one of our most important tools. To one who loves color as the musician loves tonal harmonies, nothing is more satisfying than arranging iris groups in combinations that will lend particular interest and charm to the garden.

Gertrude Jekyll, the noted English gardener, in her book on color writes: "I am strongly of the opinion that the possession of a quantity of plants, however fine the plants may be, however ample their number, does not make a garden; it is only a collection, just like having a box of paints from the paint store. Having the plants, the great point is to arrange them with careful selection and definite intention."

Any color is good in nature, but it becomes more beautiful if found in its appropriate place, in the right combination.

The real test of a lovely picture is how long it remains in memory. Today, as I look out from my hillside home, everywhere is snow and sleet, but I can rejoice in the memory of the beautiful pictures of gardens I have visited as well as of my own.

First of all, there is a planting in my own garden of GOLDEN FLEECE and SNOW FLURRY, between and a little to the rear OLD PARCHMENT, while beyond is GREAT LAKES. Soft and subtle are these colorings, a very arresting sight. Planted in large clumps, luxuriant in foliage and flower, they present an unforgettable picture, and during the very hot days of the blooming season, this gave me the feeling of cool tranquility. GOLDEN FLEECE especially brought out the delicate undertone of pink in OLD PARCHMENT.

Not far away were MOUNT CLOUD with MADAME MAURICE LASSAILLY. These two iris have never received the recognition they deserve. MOUNT CLOUD has a stately beauty, while MADAME MAURICE LASSAILLY, like a taller sister of AMIGO, has a rich loveliness not often found in iris collections. Its deep velvet falls with a border of violet blue is greatly enhanced by MOUNT CLOUD's satiny sheen of blue white. Do try this.

The supremely beautiful PRAIRIE SUNSET stands out in any place, but I like blue and cream, and use GREAT LAKES and FAIR ELAINE. Can anyone suggest a lovelier combination? Some day it is my intention to use PALE MOONLIGHT (or one of our newer blues) with it.

Another delightful pair are MATTERHORN with GOLDEN HIND. The newer whites may hold places of honor, but the serenely lovely MATTERHORN will never be outclassed. The absence of markings—even the beard is cream—and its exquisite chaliced cups suggest an ecclesiastical setting of a church altar.

Useful in endless arrangements are many cream or cream-white iris. GOLDEN TREASURE with its rich golden center is a fitting foil for pale blues, and my choice is PALE MOONLIGHT for a very telling effect. WABASH, on a terrace just above GOLDEN TREASURE, helped to create a group of distinction.

ARCTIC, the new white and gold, has an area of bright yellow throughout the center of the flower, somewhat like GOLDEN TREASURE, but this iris is gleaming creamy white. It is wonderful with SHINING WATERS.

BRIDAL VEIL also has a gleaming yellow heart, and to me it is very pleasing with CHINA MAID, but it has so many uses in creating contrasts.

SNOQUALMIE lends its creamy tone in bringing out hidden charm in darker flowers such as MOHRSON, which never looked dull, as some may say of it.

MARQUITA is a distinctive flower, and really needs no companion; this clump attracts the attention of every visitor. EASTER MORN can make a one-man show because of its stately beauty, its size and graceful lines. It grows in front of an old gray wall, and last season *Saponaria ocymoides* trailed its myriad pink blossoms like a fountain down the wall back of EASTER MORN, while *Veronica repens* bordered the front with its low-growing blue blossoms. The gray of old walls provides interesting backgrounds for iris, as much so as that of cool greens. In such dry walls may grow the *Thymus lanuginosus* and other members of this family, veronicas and dianthus.

GLORIOLE, the peer of pale blues, is a fitting companion to CHINA MAID, but I believe the iridescent quality of GLORIOLE is made more effective when it is grown near EASTER MORN, as was CLAIRE DE LUNE with JASMANIA.

Indeed, the use of blue in the garden might call for an entire discussion, for the French architect, Violet le Duc, who was an authority on cathedral windows, wrote: "The first condition for an artist in glass is to know how to manage blue. We have chiefly

to remember the law that blue is light, but also it is that luminous color which gives value to all others, and blues should be placed with a very delicate observation of the effects they should produce on other tones, and other tones on them." Violet le Duc might have been writing about iris planting instead of church windows.

In early summer, nature shows perfect blue skies, and the out-of-doors is clothed in green. Thus gardens need more blues, especially in iris plantings, using other colors for pattern and contrast. It will be a happy time when I can have large clumps of CHICORY BLUE, AZURE SKIES, and SPARKLING BLUE to combine with special favorites. Single stalks are interesting, to be sure, when a new variety comes into the garden, but only when it is displayed in a mass does its real charm appear.

Gardens on hills or with wide open spaces have the sky to lend effectiveness. I noted this in Kenneth Smith's garden in Dongan Hills, with a far view of the sea. As one enjoyed his magnificent clump of EASTER MORN and VIOLET SYMPHONY and other fine plantings, the blue of the sky appeared to be a drop curtain back of them. Likewise the effect of blue sky and mountains in Mr. Fishburn's garden.

We all remember the lovely combinations in our President's garden in Nashville during the meeting there. Mr. Wills has used evergreens and shrubs against an old brick wall as the background for iris plantings. INDIAN HILLS was effective with NARANJA, and that charming blue WAVERLY set off coppery FIESTA. Outstanding and best of all, great clumps of GREAT LAKES and GOLDEN TREASURE flanked the gateway to the rear parterres.

Dr. Franklin Cook in his gem of a garden which we saw during the meeting in Evanston gave proof of his love of color arrangement. With a background of the tall mauve IMPERIAL BLUSH were masses of lovely CASTALIA with cream KALINGA, while in front dainty NO-WE-TA completed the picture. In another group he used JEAN CAYEUX with SENSATION and CRYSTAL BEAUTY. Certainly many went home determined to enhance the beauty of their garden with color contrasts.

Mrs. Clutton, of Highland Park, Ill., shares with me a keen interest in color grouping, and in a recent letter writes that for an early effect she likes SPRING PROM, GLORIOLE, and JUNALUSKA, and that enchanting blue Siberian GATINEAU near a pink dictamnus

(gas plant) is a pleasing picture. The white gas plant is a wonderful foil for iris of almost any color.

Her planting of the medium-late varieties, GREAT LAKES and E. MERTON GAGE, is delightful, and GREAT LAKES with DEEP VELVET and GOLDEN MAJESTY is fine.

Mrs. Clutton is now dreaming of a yellow border beginning with deep-toned shades, perhaps LOUVOIS, brown rich and velvety; then NARANJA, GOLDEN MAJESTY, MING YELLOW on to the lighter ones, FAIR ELAINÉ and GOLDEN TREASURE and GOLDEN FLEECE, with cool MOONLIGHT MADONNA among them for accent. On and on in endless array she will include all the varying shades and tones. It sounds fascinating. I think I shall try it myself, but I don't know how I can keep my favorite blues out. Right here I make a plea to our hybridizers to create more blues!

The Detroit Iris Society has many good iris growers who give thought to the beauty of color grouping.

Mrs. Knoblock, the president, is partial to a planting of ARCTIC, ELSA SASS, and SHINING WATERS, while Mrs. Nass has planted as her favorite trio CHINA MAID, ELSA SASS, and SHINING WATERS, also THE RED DOUGLAS, MATTERHORN, and MING YELLOW. Another section has NARANJA, INDIANA NIGHT, and THE BENGAL LANCER. Mrs. Burton enjoys PURISSIMA, MOUNT ROYAL, and WABASH. Mrs. Bender thinks MARQUITA and EL TOVAR make a stunning combination.

These members give a great deal of study to the culture of worthwhile iris and have a very discriminating taste for color masses.

There are some gardeners who like to plant other blooming plants among iris, but I think an iris planting is too lovely to make it share honors with other flowers. Furthermore, iris alone will be much more free from borer and rot if the plants can have free circulation of air and sun. It would be helpful if we could hear from those who have found that they can grow iris well in with other things. I do grow some regal lilies in occasional places in the back of iris borders—they do not shade the iris and bloom after the iris are past, presenting a glorious display.

I forgot to tell of little SOME LOVE with AMIGO. It is one of my favorite combinations—I call it my jewel.

The RED DOUGLAS is a gorgeous color, and I eagerly look forward to seeing it bloom with GOLDEN EAGLE. CHRISTABEL is another

charmer. I grow it with MOONGLO, but a self yellow would be better.

MING YELLOW is a fine iris both in color and form and is very satisfying with SHINING WATERS. I hope I can write a second part to this color story because I have to omit so many of my preferences—MOUNT WASHINGTON, WHITE GODDESS, MELITZA, PRISCILLA, MELANIE, BIRCHBARK, the very new SUNNY RUFFLES, and all the new ones I am waiting to see bloom.

In the pages of any good iris catalogue one can find dependable and beautiful iris, tall and low-growing, early and mid-season, to make an interesting display if a little thought is given to some combination of grouping and to unity and color.

BEARDLESS IRIS FOR OUR GARDENS

MRS. THOMAS NESMITH

■ OUR EDITOR has asked me to tell you a bit about the different groups of beardless iris that are good for garden effect and which may be grown easily by the average gardener. There is room in most gardens for some of these iris, and they will add grace and charm to any planting.

In recent BULLETINS, there have been several articles on different divisions of the beardless class, but with very few cultural directions or suggestions for special use in combination with other perennials for delightful garden effect, so I am giving you general directions for the use of the beardless in your gardens.

First of all, most of us wish to have our gardens give us flowers throughout the season, and with use of the beardless we may have iris bloom for a much longer period than many gardeners realize. In arranging a garden that will give bloom at all times, it is necessary to plan ahead, and the discerning gardener will have his notebook handy during the summer so that he can jot down the clashes in color that appear in the garden in the flowering season, as well as suggestions for fall-re-arranging for best effect. These should be noted in the book for it is so easy to forget without these notes. Seldom do two people like the same arrangement or contrast of color, so I have suggested this way to help you to attain such re-

sults as suit your own fancy for, after all, your garden should have a personal touch.

Aside from the value of the beardless in the garden, they have added interest, for they are adapted especially for flower arrangement. Their blooms are dainty and charming, and are much better for use in the house than the large flowered bearded varieties.

Many of the beardless are not well known, but they are distinct additions to the iris family, and are grown easily if just a few planting and cultural rules are followed. Bear in mind that all beardless like a cool, moist soil with plenty of leaf mold or some kind of humus and animal fertilizer combined with good garden loam. They do not like bone meal or lime, and thrive better in an acid soil rather than an alkaline or too sweet soil.

They have fibrous roots that should not be exposed to sun or wind during planting for if they are allowed to dry out, it will take these plants a long time to recover from this harsh treatment. All beardless should be watered-in well at planting time and given plenty of water during their growing season.

With the exception of the *Evansia* group, all beardless should be planted with their fibrous roots well spread out, and the crown of plant from two to three inches below the surface of the ground. Do not raise the beds for beardless iris. Plant them on the level of the surrounding ground, but care should be taken not to allow water to stand over them during the winter months. When once planted they should be allowed to remain until the clumps have increased to good size. Do not keep any of your plants "on wheels" if you wish good results.

There are at least five groups of beardless iris that are well adapted to our gardens. They are: the Siberians, the *Evansias* or Crested iris, the hybrids and species of the southern states iris, the *spurias*, and the *Kaempferi* or Japanese iris.

The Siberians are better known than any others of the beardless group, and are most satisfactory for they are very hardy and not subject to rot or winter killing. These are the first to bloom, commencing to flower just before the tall bearded and continuing on through that season. They will grow in almost any place; increase rapidly; when established, will give a great profusion of bloom, and in mass they have great carrying qualities.

The Siberians are most effective planted in groups in a garden border for they will bloom before most other perennials, and if

these groups are interspersed among Oriental poppies, later blooming hemerocallis, and aconitums, you will have bloom in this spot throughout the season. The pale blue Siberians are lovely planted near the earlier pink Oriental poppies, an intriguing combination. If you are fond of the red Oriental poppies, the deep blue and white Siberians are excellent to use with them. Use the dark blues and blue-purples with the early blooming hemerocallis. Good varieties of hemerocallis to use are Apricot, Tangerine, Flavina, and Crown of Gold. They are ideal for a waterside planting; in such a place contrasting colors give a more distinctive touch.

Good reliable varieties of Siberians that are very effective in the garden are: whites, SNOWCREST, MARTHA LE GRAND, MATANE, and LACTEA; pale and medium blues, SUMMER SKY, ANN STAHLMAN, GATINEAU, MOUNTAIN LAKE, and COOL SPRING; dark blues and blue-purples, CAESAR, KENOGAMI, CAESAR'S BROTHER, and TROPIC NIGHT; lavender pinks, MOONSPRITE, MORNING MAGIC, AHALYA, and BABET; reds and reddish tones, RED EMPEROR, HELEN ASTOR, ZEST, and the magnificent new red, ERIC THE RED. There are many excellent varieties, but these I have listed are outstanding.

Most of us have a half-shady place in the garden that seems to demand low-growing plants for the border, and there is nothing more lovely for this than the Evansia or Crested iris. Really this group is not classed as beardless iris, but the varieties are so lovely that I feel they should be included. In form they are half-way between bearded and beardless, with charming miniature flowers in pale blue, white, and lavender. They have slender creeping rhizomes that spread rapidly and soon will give myriad bloom in early June. Also there are the lovely little species iris VERNA, VERNAL DAWN, and VERNAL SNOW. These Vernal iris are low growing and can be used to advantage in the very front of the border, alternating with Cristata blue.

Especially adapted to rock garden or border planting, they are thoroughly hardy and once planted require very little attention. A fascinating combination is their use with the bulbous scillas and grape hyacinths. The scillas will flower in early May, closely followed by the grape hyacinths and the different varieties of the Crested and Verna iris. For later bloom use the lovely Hosta minor alba with its dainty pure white blooms and slender leaves, for it is well adapted to a shady spot. A planting of this kind may be

left without much attention for years, and each year becomes more beautiful.

In such a planting use *Cristata* white and blue, *Tectorum* white and blue, *VERNA*, *VERNAL DAWN*, and *VERNAL SNOW*, and the dainty flowered lavender *GRACILIPES*. Such a planting will be a continued source of pleasure.

In the fall a light dressing of leaf mold and a bit of pulverized sheep manure will provide enough enrichment. Just before the ground freezes it is a good idea to give the *Tectorums* a little winter protection for their leaves are evergreen and it is better if they are shaded from winter sun. Plant the Crested and *Verna* iris with about one inch of soil over the rhizomes.

Are you looking for something lovely and unusual for your garden? Then by all means try the species and hybrids of the Southern States iris for they offer a new field of interest, and even the most particular gardener will be thrilled by their exquisite colors and form of flower. They have a wide range in colors—white, pink, rose, red, lavender, real blue, cream, and yellow. Their semi-flaring flowers, strong slender stalks, and graceful foliage remind one of the single and double *Kaempferi* done in miniature. These flower after the bearded and fill the interim before the blooming of the *Spurias*.

For flower arrangement they are ideal, and for this purpose better than any other form of iris. Usually each stalk has three or more flowers open at one time. These emerge at the nodes of the stems, and in most cases are accompanied by a short bract-like leaf. An arrangement will last for days; as the buds continue to unfold the older blooms may be clipped off.

These iris are adapted especially for planting around pools and half-shady places; in fact, their flowers are larger and the foliage more luxuriant if planted in semi-shade. There was an excellent article in the October *BULLETIN*, 1943, about the Louisiana iris, but as yet I have not tried many of them in our northern gardens. However, the following varieties are among those that I have found dependable and very beautiful in color: *ELIZABETH WASHINGTON*, *KRAEMER YELLOW*, *POSI*, *MARTHA WASHINGTON*, *KRAEMER TAN*, *MARY LOVE*, and *MCGREGOR*.

The *spurias* are not well known, and it is a pity for they deserve a prominent place in our perennial borders. When once planted

they will increase rapidly and hold their own, not becoming smothered by other heavy growing perennials. The foliage is strong, tall, and sword-like with many flowering stalks well above the foliage. The plants are very resistant to iris blights and pests and their foliage is most decorative throughout the season. In form the flowers resemble the bulbous Spanish and Dutch iris that we see in florists' windows. The newer varieties of spurias have larger flowers with better form and substance. They are hardy and require very little attention.

There is quite a wide range in color: white, yellow, purple, blue, bronze, and blended colors. I like to use them in clumps either in the border or as accents in the garden; also in between the July and August flowering hemerocallis, for their foliage is harmonious and their blooming seasons do not conflict.

A combination of beardless iris that will give you almost continuous bloom for two months would be Siberians and spurias in the background for their height; Kaempferi iris in front of these, and for the very front, the hybrids of the Southern States iris. All of these like a slightly acid soil, and if planted together they may be given plenty of water with very little bother.

Plant the early flowering EUPHROSYNE with late flowering pink Oriental poppies; New Perfection and Coral Cup are two poppies that are good for such a combination. Use the taller varieties of iris such as BRONZSPUR, SUNNY DAY, and BEN LOMOND as accents for they will stand out in the garden. In this spuria group a great favorite for flower arrangement is the charming GRAMINEA with its dainty and fragrant flowers of blue-purple nestled well down in the strong, slender, dark green foliage.

Varieties that are well adapted to planting in any garden are: SUNNY DAY, EUPHROSYNE, HAZY HILLS, BEN LOMOND, BRONZSPUR, SAUGATUCK, SKYLINE, and GRAMINEA. There are several others of equal merit, but the above are especially lovely. Do try some of the spurias; you will be well pleased with them.

The Kaempferi iris are the last of the beardless group to bloom. Commencing late in June, with proper selection one may have bloom until after the middle of July. They have larger flowers than any others of the beardless and are divided into two classes: the single varieties have short upright standards and large pendant falls, while the double ones have at least six so-called petals that form

a full horizontal flower. The blooms are most resplendent with their range of color from white down through orchid, lavender pink, blue, mauve, and purple. The bloom stalks are from two to four feet in height, depending on the variety, and these extend well above the slender foliage. Most of them have high branching, and the flowers are carried nearly on one level, thus giving a sheet of color in mass planting.

It is not necessary to have a large garden in order to display their beauty for they adapt themselves to many places. Use them at the base of a terrace so that you can look down on the broad horizontal flowers. They are very lovely bordering a pool, either in clumps or completely surrounding it, often with their large blooms mirrored in the placid water.

The Kaempferi are most satisfactory planted with Siberian iris and hemerocallis bordered by *Hosta caerulea* or *Hosta plantaginea* for in such a planting you will have continuous bloom for three months, something to be desired in any garden. Do not plant them too near brilliant colored peonies for if you do there is apt to be a clash of color. Used as accents in the garden, they are very effective. The names of the varieties are so confused that I shall not attempt to give you a list of these.

All beardless may be planted in spring or late summer. Personally, I like late summer planting for if given plenty of water at planting time they will become well established before winter sets in. The first winter after the plants are set, be sure and give a light mulch after the ground has frozen. This is to prevent heaving during the winter months.

Few can resist the appeal of the beardless iris, and when you know them you understand their charm and usefulness in the garden. They are a sturdy race, remarkably free from pests and diseases—in fact, they are most dependable. They will repay you well with very little effort, and you will find them of great assistance in maintaining the succession of bloom in your garden.

UNOFFICIAL IRIS SYMPOSIUM, 1944

KENNETH D. SMITH

■ FOR THE benefit of new members who may be at a loss to understand the reasons for or nature of this Symposium, a word of explanation is due.

The subject of the "best" iris has always been a matter of heated discussion and wide difference of opinion. This is undoubtedly due to the fact that different climatic and soil conditions in various parts of the country produce commensurately varied results, so that a variety considered "tops" in one section may be rated as very poor in another—and this in spite of the fact that the same criteria of color, substance, form, lasting quality, etc., were used as the bases of judgment.

It was this state of affairs which prompted me five years ago, on my own initiative, to find some means by which an iris that performed universally well might receive fitting recognition. An obvious outgrowth was the compilation of the personal preferences of accredited iris judges from all parts of the country. The resulting "symposium" necessarily would give the consensus of these experts and thereby present a fair picture of the "best" iris, tabulated in the order of agreed preference.

This year the rules and method of tabulation were radically different from those used in prior years, and these changes were made through helpful suggestions offered by Mr. R. P. Loomis, of Bellingham, Wash., and Mr. A. H. Heller, of Los Angeles, Calif. Both of these gentlemen thought the iris in the 1943 Symposium should have been ranked not by total points received, but rather by their numerical average. They cited the example of *ELMOHR*, which received 25 points from nine judges and was tied for 79th position, as compared with other iris which had received a similar number of points but from 19 and 20 judges. They thought rightly that *ELMOHR* deserved a much higher ranking, but under the then-existing rules, it was not feasible to use a numerical average. Mr. Loomis called to my attention the rating system used by the Canadian Gladiolus Society, and that system, with some modifications, I have adopted for this Symposium.

With 105 judges participating, this Fifth Unofficial Symposium can well be considered the most successful of all those which have

been held to date, and I am greatly indebted to the many judges who returned ballots and who cooperated so splendidly.

All judges were furnished printed ballots listing the names of 223 intermediate and tall bearded iris with the addition of such hybrids as ELMOHR, GRACE MOHR, MOHRSON, and ORMOHR. These iris had all won Honorable Mention or higher awards from the A. I. S., and either had been listed in the four previous Symposiums or had won their awards in the past five years. Judges were first asked to cross out on the ballot the names of all iris that they had not seen in bloom in 1942 or 1943, and these iris did not figure in the tabulation. From the remaining iris, all of which had been seen by the judges, they voted for their favorite 50, listing their first ten choices as Class A, the next 20 as Class B, and the remaining 20 as Class C. Judges were further allowed to place in Class E, from the remaining iris, those that did not perform well in their gardens or gardens of others that they had visited and which they considered not worthy enough to be included in a Symposium of 100 outstanding iris. In the tabulation A iris received three points; B iris two points; C iris one point; E iris minus-one point, and those seen and not crossed out, zero points. The total number of points received for each iris was then divided by the total of the judges who saw them, and this gave their numerical average.

As a result of the balloting, GREAT LAKES again emerged the winner, with PRAIRIE SUNSET, the '43 Dykes medalist, in second place. Three new iris appear in the first ten: DAYBREAK, which ranged 38th last year; OLA KALA, a '43 introduction; and ELMOHR, which made a sensational gain from 79th position. They displaced THE RED DOUGLAS, which had ranked sixth; GOLDEN FLEECE, which had ranked seventh; and CITY OF LINCOLN, which had occupied tenth position.

The best showing of iris that made the Symposium for the first time were OLA KALA, sixth; LORD DONGAN, 12th; and ALBA SUPERBA, 18th. In Symposiums conducted under former rules, with no numerical average, these iris would have found themselves in the same situation that existed for ELMOHR last year.

The poorest showings were made by GOLDEN SPIKE, which tumbled from 25th to 90th position; JUNALUSKA, from 18th to 66th; and E. B. WILLIAMSON, from 40th to 91st.

UNOFFICIAL IRIS SYMPOSIUM, 1944

VARIETIES IN ORDER OF NUMERICAL AVERAGE (105 JUDGES VOTING)	Numerical Rating	Group "A" Iris. 3 Points Each	Group "B" Iris. 2 Points Each	Group "C" Iris. 1 Point Each	Group "E" iris. Minus 1 Point	Iris Seen, But Not Voted for. 0 Points Each	Iris Not Seen
1. GREAT LAKES '38* (1)-----	2.453	65	18	7	--	7	8
2. PRAIRIE SUNSET '39 (3)-----	2.302	56	20	14	1	5	9
3. SPUN GOLD '40 (7)-----	1.975	36	24	9	1	13	22
4. WABASH '36 (2)-----	1.893	35	39	12	--	17	2
5. DAYBREAK '41 (38)-----	1.828	19	25	10	--	10	41
6. OLA KALA '43 (—)-----	1.813	13	16	7	--	7	62
7. ELMOHR '42 (79)-----	1.811	31	12	9	1	16	36
8. DEEP VELVET '39 (5)-----	1.724	23	36	9	1	18	18
9. GOLDEN MAJESTY '38 (4)----	1.705	28	34	14	4	15	10
10. SABLE '38 (9)-----	1.693	32	27	22	1	19	4
11. GOLDEN FLEECE '40 (7)-----	1.650	31	18	9	1	24	22
12. LORD DONGAN '40 (—)-----	1.633	7	12	4	--	7	75
13. AMIGO '34 (12)-----	1.535	18	40	19	1	21	6
14. FAIR ELAINE '38 (11)-----	1.451	18	35	14	3	23	12
15. THE RED DOUGLAS '37 (6)---	1.392	22	30	20	4	26	3
16. CAROLINE BURR '40 (22)----	1.338	11	24	12	2	19	37
17. CITY OF LINCOLN '37 (10)----	1.326	18	30	22	2	29	4
18. ALBA SUPERBA '43 (—)-----	1.323	6	12	3	--	13	71
19. BLUE SHIMMER '42 (69)-----	1.311	15	14	5	2	22	47
20. BROWN THRASHER '41 (—)-----	1.254	13	12	8	2	20	50
21. TISHOMINGO '42 (—)-----	1.235	9	6	3	--	16	71
22. INDIANA NIGHT '41 (75)-----	1.188	11	11	8	--	23	52
23. OLD PARCHMENT '39 (16)----	1.183	16	18	22	3	28	18
24. VIOLET SYMPHONY '40 (52)-----	1.175	7	18	10	--	22	48
25. CAPTAIN WELLS '41 (35)----	1.174	9	17	13	--	24	42
26. FRANCONIA '42 (89)-----	1.151	7	6	5	--	15	72
27. MARY E. NICHOLLS '39 (48)-----	1.126	11	18	16	--	30	30
28. DOWN EAST '43 (—)-----	1.125	3	2	5	--	6	89
29. MELITZA '40 (14)-----	1.113	14	20	12	6	27	26
30. RED VALOR '39 (35)-----	1.099	9	17	17	--	28	34
31. LOS ANGELES '27 (—)-----	1.098	15	23	21	--	43	3

*Figures in parentheses denote ranking in 1943 Symposium.

VARIETIES IN ORDER OF NUMERICAL AVERAGE (105 JUDGES VOTING)		Numerical Rating	Group "A" Iris. 3 Points Each	Group "B" Iris. 2 Points Each	Group "C" Iris. 1 Point Each	Group "E" iris. Minus 1 Point	Iris Seen, But Not Voted for. 0 Points Each	Iris Not Seen
32.	SUNSET SERENADE '43 (—)	1.090	5	9	4	1	14	72
33.	COPPER ROSE '41 (38)	1.084	7	18	7	—	27	46
34.	AZURE SKIES '43 (—)	1.079	3	13	6	—	16	67
35.	CALIFORNIA PEACH '41 (—)	1.078	4	20	4	1	22	54
36.	GLORIOLE '33 (21)	1.074	13	27	13	5	36	11
37.	RUTH POLLOCK '39 (25)	1.053	7	28	22	1	35	12
38.	SNOW FLURRY '39 (30)	1.052	9	20	17	4	26	29
39.	YELLOW JEWEL '39 (29)	1.032	5	18	12	—	26	44
40.	L. MERTON GAGE '42 (95)	1.020	9	8	7	1	23	57
41.	PINK REFLECTION '42 (—)	1.000	6	8	1	—	20	70
42.	MOONLIGHT MADONNA '43 (—)	.977	2	12	13	—	17	61
43.	CHRISTABEL '36 (17)	.968	4	28	27	2	35	9
44.	MULBERRY ROSE '41 (—)	.962	9	8	8	—	28	52
45.	CHINA MAID '36 (13)	.961	11	32	13	11	36	2
46.	ELSA SASS '39 (18)	.947	6	30	16	4	39	10
47.	STARDOM '41 (32)	.944	4	21	15	1	31	33
48.	ARCTIC '40 (24)	.935	5	22	14	—	37	27
49.	MING YELLOW '38 (27)	.925	9	17	15	2	37	25
50.	GOLDEN TREASURE '36 (15)	.908	8	22	21	1	45	8
51.	THE ADMIRAL '41 (73)	.873	6	15	16	2	32	34
52.	EDWARD LAPHAM '42 (89)	.859	7	14	6	—	37	41
53.	MATTERHORN '38 (22)	.853	5	18	21	2	36	23
54.	MISSOURI '33 (27)	.840	10	15	29	5	41	5
55.	SNOW CARNIVAL '42 (71)	.816	5	10	5	—	29	56
56.	SHINING WATERS '33 (18)	.786	8	20	25	8	42	2
57.	LATE SUN '40 (75)	.782	2	10	10	—	24	59
58.	GARDEN FLAME '41 (—)	.779	5	13	5	—	36	46
59.	BRIGHT MELODY '41 (—)	.777	4	—	2	—	12	87
60.	DISPLAY '42 (—)	.764	1	10	3	—	20	71
61.	LIGHTHOUSE '36 (35)	.753	4	18	22	3	42	16
62.	ORMOHR '37 (89)	.752	9	17	12	3	52	12
63.	ICY BLUE '40 (95)	.750	4	14	12	1	37	37
64.	BALMUNG '39 (34)	.732	7	12	20	2	45	19
65.	COPPER PINK '41 (—)	.729	3	8	10	—	27	57

VARIETIES IN ORDER OF NUMERICAL AVERAGE (105 JUDGES VOTING)		Numerical Rating	Group "A" Iris. 3 Points Each	Group "B" Iris. 2 Points Each	Group "C" Iris. 1 Point Each	Group "E" iris. Minus 1 Point	Iris Seen, But Not Voted for. 0 Points Each	Iris Not Seen
66.	JUNALUSKA '34 (18).....	.679	6	13	25	4	48	9
67.	LOUVOIS '36 (47).....	.655	3	18	14	2	50	18
68.	MINNIE COLQUITT '42 (—).....	.647	3	5	3	1	22	71
69.	PRINCE OF ORANGE '40 (64)	.645	3	10	12	1	36	43
	STELLA POLARIS '39 (69).....	.645	—	15	13	3	31	43
71.	MARY VERNON '42 (86).....	.638	1	10	2	2	21	69
72.	WINTER CARNIVAL '41 (73)	.632	6	3	9	—	34	53
73.	GRAND CANYON '41 (—).....	.626	2	11	9	—	37	46
74.	MELANIE '41 (—).....	.620	1	11	11	—	35	47
75.	TIFFANY '38 (64).....	.617	3	16	23	1	59	3
76.	FLORA ZENOR '42 (86).....	.616	10	8	10	11	34	32
77.	RED GLEAM '39 (40).....	.611	6	10	15	1	53	20
78.	MISSOURI NIGHT '38 (84).....	.607	4	10	3	4	30	54
79.	NIGHTFALL '42 (—).....	.605	2	5	7	—	24	67
80.	STORM KING '40 (54).....	.603	4	10	9	3	37	42
81.	GARDEN MAGIC '36 (64).....	.602	4	12	15	1	51	22
82.	FIRECRACKER '43 (—).....	.600	2	4	4	—	20	75
	ROSY WINGS '35 (43).....	.600	3	19	21	8	49	5
84.	MAJENICA '41 (—).....	.593	2	8	7	1	29	58
85.	SIERRA BLUE '32 (43).....	.589	1	22	19	10	43	10
86.	FORT KNOX '41 (—).....	.586	4	8	3	4	27	59
	FRANK ADAMS '37 (40).....	.586	4	16	16	6	50	13
88.	LANCASTER '40 (49).....	.569	6	9	11	6	40	33
89.	WEST POINT '39 (57).....	.567	1	12	13	2	39	38
90.	GOLDEN SPIKE '40 (25).....	.560	5	10	11	4	45	30
91.	E. B. WILLIAMSON '37 (40)	.557	—	17	23	4	51	10
92.	VATICAN PURPLE '43 (—).....	.555	1	3	1	—	13	87
93.	MISS CALIFORNIA '37 (59).....	.554	6	9	14	4	50	22
94.	REMEMBRANCE '42 (—).....	.547	2	7	4	1	28	63
95.	CALIFORNIA TREK '41 (—).....	.533	4	3	2	4	17	75
96.	BUTTERCUP LANE '41 (75).....	.521	2	11	9	1	46	36
97.	CORAL MIST '41 (—).....	.517	2	4	1	—	22	76
98.	MELLOWGLOW '42 (98).....	.513	4	3	3	2	25	68
99.	GUDRUN '30 (59).....	.505	4	12	20	7	54	8

PRAIRIE SUNSET received an E vote from Virginia, and it barely escaped several others. One New England judge wrote that he had not seen a good stalk there in three years, and a Michigan judge wrote he also felt like marking it E. SPUN GOLD received its E vote from Missouri; ELMOHR's from Illinois; and DEEP VELVET's from New York. GOLDEN MAJESTY had four from Pennsylvania, Indiana, Illinois and Nebraska, while SABLE collected one from Texas. GOLDEN FLEECE received one from New York; FAIR ELAINE collected three from Illinois, Nebraska and Utah; THE RED DOUGLAS, four from Massachusetts, New York, Utah, and California; and CAROLINE BURR, two from the same family in Iowa. CITY OF LINCOLN also collected one from Iowa with another from Utah; BLUE SHIMMER gathered its two in the East from Massachusetts and New York; and BROWN THRASHER, which put on a sensational comeback to rank 20th after failing to make last year's Symposium, received its two E's in Illinois and Iowa.

A strange case is that of FLORA ZENOR; one would think it would rank near MELITZA, but we find MELITZA ranks 29th and FLORA ZENOR 76th. FLORA ZENOR earned ten A's, but was voted 11 E's! It is an iris which causes considerable and often violent discussion as it either appeals or is heartily disliked.

Four iris earned the distinction of ranking zero: this means the points cast in their favor were equaled by the E votes cast against them. GRACE MOHR headed the list with 16 E's; SEDUCTION had 12; TITIAN LADY, ten; and WHITE PRINCE, three.

Twelve iris earned the greater distinction of coming out minus-zero. They were ADVENTURE, BONNIE LASS, CHAMPAGNE GLOW, CHOSEN, COPPER CRYSTAL, JASMANIA, MAYA, MRS. SILAS WATERS, SHAWANO, SUNDANCE, SUN SPOT, and THE DARB. ADVENTURE is the strangest case of all because it had just been awarded an Honorable Mention by the A. I. S. in 1943. In this Symposium it received only two positive votes from the 28 judges who had seen it!

Intermediate iris did not fare very well; only a few judges marked that they had seen them, and fewer still gave them any points. BLACK HAWK, 0.476, would rank 109th, and PINK RUFFLES, 0.435, 117th. It seems that few people realize intermediate iris are needed in every garden for border planting, for an iris planting without them is usually top heavy.

Twenty-eight new iris are found in this Symposium. They are:

OLA KALA (6)
 ALBA SUPERBA (18)
 TISHOMINGO (21)
 LOS ANGELES (31)
 AZURE SKIES (34)
 PINK REFLECTION (41)
 MULBERRY ROSE (44)
 BRIGHT MELODY (59)
 COPPER PINK (65)
 GRAND CANYON (73)
 NIGHTFALL (79)
 MAJENICA (84)
 VATICAN PURPLE (92)
 CALIFORNIA TREK (95)

LORD DONGAN (12)
 BROWN THRASHER (20)
 DOWN EAST (28)
 SUNSET SERENADE (32)
 CALIFORNIA PEACH (35)
 MOONLIGHT MADONNA (42)
 GARDEN FLAME (58)
 DISPLAY (60)
 MINNIE COLQUITT (68)
 MELANIE (74)
 FIRECRACKER (82)
 FORT KNOX (86)
 REMEMBRANCE (94)
 CORAL MIST (97)

They displaced the following 30 in the 1943 Symposium:

ANGELUS (30)
 MIDWEST GEM (45)
 COPPER LUSTRE (49)
 AUBANEL (52)
 NARANJA (55)
 BRUNHILDE (61)
 GOLDEN HIND (61)
 MATULA (64)
 TREASURE ISLAND (75)
 DUBROVNIK (79)
 OZONE (79)
 EASTER MORN (86)
 MOUNT CLOUD (93)
 SHAH JEHAN (95)
 SAN FRANCISCO (98)

MOUNT WASHINGTON (32)
 RADIANT (45)
 MOROCCO ROSE (51)
 CALIFORNIA GOLD (55)
 GOLDEN EAGLE (57)
 CHEERIO (61)
 FLORENTINE (64)
 STORM KING (71)
 CHICORY BLUE (79)
 JEAN CAYEUX (79)
 LADY NAOMI (84)
 EXCLUSIVE (89)
 RAEJEAN (93)
 DÉPUTÉ NOMBLOT (98)
 WAKARUSA (98)

As has been customary in the past, I have added a color classification arranging the 99 Symposium iris according to garden color and listing them in order of their popularity.

White

CAROLINE BURR, ALBA SUPERBA, FRANCONIA, SNOW FLURRY, MATTERHORN, SNOW CARNIVAL, STELLA POLARIS, WINTER CARNIVAL, GUDRUN.

White with Yellow Markings

GOLDEN FLEECE, FAIR ELAINE, MARY E. NICHOLLS, MOONLIGHT MADONNA, ELSA SASS, ARCTIC, GOLDEN TREASURE.

Bright Yellow

SPUN GOLD, OLA KALA, GOLDEN MAJESTY, YELLOW JEWEL, MING YELLOW, LATE SUN, FORT KNOX, GOLDEN SPIKE, CALIFORNIA TREK, BUTTERCUP LANE.

Orange, Tan, and Brown Effect

BROWN THRASHER, LOUVOIS, PRINCE OF ORANGE.

Red and Red Effect

THE RED DOUGLAS, RED VALOR, CHRISTABEL, EDWARD LAPHAM, GARDEN FLAME, DISPLAY, JUNALUSKA, RED GLEAM, GARDEN MAGIC, E. B. WILLIAMSON.

Pink and Pink Effect

MELITZA, L. MERTON GAGE, PINK REFLECTION, MULBERRY ROSE, CHINA MAID, LIGHTHOUSE, COPPER PINK, MELANIE, FLORA ZENOR, ROSY WINGS, LANCASTER, MISS CALIFORNIA, REMEMBRANCE, CORAL MIST.

Light Blue and Lavender

GREAT LAKES, TISHOMINGO, AZURE SKIES, GLORIOLE, SHINING WATERS, ICY BLUE.

Medium Blue, Light Violet or Mauve

VIOLET SYMPHONY, THE ADMIRAL, MISSOURI, ORMÖHR, MISSOURI NIGHT, SIERRA BLUE, WEST POINT.

Purple

ELMÖHR, DEEP VELVET, SABLE, LORD DONGAN, INDIANA NIGHT, CAPTAIN WELLS, DOWN EAST, NIGHTFALL, STORM KING, VATICAN PURPLE.

Blue Plicata

BLUE SHIMMER, LOS ANGELES, MINNIE COLQUITT.

Yellow Plicata with Rose or Brown Markings

RUTH POLLOCK, BALMUNG, TIFFANY, FIRECRACKER.

Amoena and Neglecta

WABASH, AMIGO.

Variegata

CITY OF LINCOLN, MARY VERNON, FRANK ADAMS.

Blends

PRAIRIE SUNSET, DAYBREAK, OLD PARCHMENT, SUNSET SERENADE, COPPER ROSE, CALIFORNIA PEACH, STARDOM, BRIGHT MELODY, GRAND CANYON, MAJENICA, MELLOWGLOW.

Interesting Sidelights

This year judges cooperated so well that a representative number of votes were received from nearly every region. The 105 ballots cast were received as follows: Region One, 21; Region Two, 7; Region Three, 2; Region Four, 5; Region Five, 2; Region Six, 11; Region Seven, 3; Region Eight, 1; Region Nine, 28; Region Ten, 4; Region Eleven, 1; Region Twelve, 2; Region Thirteen, 6, and Regions Fourteen and Fifteen, 12. This truly makes it an All-American Symposium.

Mr. Heller, after the Fourth Symposium was published, sent out a questionnaire with a long list of iris to the judges who had returned ballots in that Symposium. From the replies received, it seems that certain judges, who had voted for iris in the Fourth Symposium, now marked those iris as not being known by them. This was a strange state of affairs, so I added a new rule to this Symposium that judges must have seen the iris blooming in 1942 or 1943 in order to vote for them. Several judges, when they returned their ballots, wrote they would have liked to have voted for seedlings they saw in 1941 but which they had not seen since. This was the situation I wanted to do away with, for none of those judges could know how those iris had performed in 1942 and 1943. Few people realize that the maiden bloom and performance of a seedling is sometimes far superior to that produced in subsequent years, but many hybridizers have found this out to their sorrow.

Why a Symposium? Because it gives the consensus of a great number of judges, and their collective judgment should and usually does show the 100 outstanding award iris of the year. This, in the days of dictatorship, is most refreshing! While I am a firm believer in individualism, after conducting five unofficial Symposiums, I have come to the conclusion that with the factor of individual likes and dislikes, the collective judgment of the judges is far superior to the judgment of an individual one. Some commercial growers make it a habit of listing what they term are the 100 "best" iris of the year. Such a list is one person's opinion based on the performance of the iris in that particular grower's garden, while a Symposium is the average of many judges' opinions based on the performance of the iris all over the country. In my opinion, the Symposium is much the fairer way of selecting the "best" or "most popular" iris. Symposiums are undoubtedly popularity contests and the publication of results is an event eagerly awaited.

CHANGES IN AWARDS FOR 1945

JUNIUS P. FISHBURN

■ THE BOARD of Directors voted to make no change in the Policy of Awards for 1944. An examination will show that it is just the same as last year, except of course for differences in the lists of eligible iris. The directors, however, have decided to make a change in the requirements for the Award of Merit to be effective in 1945, and thought it proper to announce this change a year in advance.

The present rule is that "Recommendations for Award of Merit shall be made only to iris registered officially which have received an Honorable Mention award and which were introduced during the five-year period beginning with 1938 and ending with 1942."

Next year the rule will read: "Recommendations for Award of Merit shall be made only to iris registered officially and properly introduced which have received an Honorable Mention award during the five-year period beginning with 1939 and ending with 1943."

You will note that the requirements are just the same: an iris still must be registered, still must be introduced, and still must have received an Honorable Mention. The change is in the way the five-year period or eligibility will be determined. For some years, through 1944, it has been determined by the date of introduction. In 1945, and until the rule is subsequently changed, the five-year period will be determined according to the year it received an Honorable Mention.

We believe that this will make it much easier to determine the list of iris eligible for an Award of Merit, and that it also will be entirely fair. An iris has to be registered now in order to be eligible for an Honorable Mention. After receiving an Honorable Mention, it will have to skip a year before it becomes eligible for an Award of Merit. It will remain so eligible over a period of five years. The skip of a year will be helpful in that members of the Society will have an opportunity to obtain iris which receive an Honorable Mention and grow them for at least two years before they become eligible for an Award of Merit, so that they can be judged on established plants. Under the present rules, an iris has to be introduced two years before the current season in order to be eligible for an A. M. An iris has sometimes received an Honorable Mention the year after it was introduced and so became eligible for

the Award of Merit the following year. Under the new rules, it would still have to wait a year. The change will affect only iris which will get Honorable Mentions this spring, that is, in 1944. Under the old rules if they had been introduced in 1943 or prior years they would have been eligible for an A. M. in 1945. Under the new rules, they will have to wait until 1946. Since they will be mostly iris which are newly introduced and which have not yet received wide distribution, we think this change will be to their advantage since it will give more judges an opportunity to see them.

We are making no changes at present in the rules regarding the Dykes. After an iris has received an Award of Merit, it will become eligible for the Dykes the following year and for the two succeeding years, that is, for a period of three years over all. It may prove advisable later on, however, to put a waiting period of one year also between the time that an iris gets an A. M. and before it becomes eligible for the Dykes. If we ever decide to do this, however, it will mean that we will have to have the same list of eligibles for two straight years. The directors will give this matter further consideration while waiting to see how the proposed system works out.

CORRECTION!

■ IN GEDDES Douglas' article, "Prelude to Pinks," published in the February, 1944, BULLETIN, the parents of Mr. Hall's variety OVERTURE were given as Seedling No. 40-30 × No. 39-62, whereas it should have been Seedling No. 40-34 × No. 39-62.

Furthermore, Seedling No. 40-34 was derived from Seedling No. 38-26 × No. 35-40, and not from Seedling No. 36-28 × No. 35-40.

WINNERS OF THE DYKES MEMORIAL MEDAL

■ THE DYKES Memorial Medal, instituted in 1926 to commemorate the work of the late W. R. Dykes in "advancing appreciation of the iris," has been awarded for outstanding varieties in England, France, and America. The method of choosing a Dykes Medal Winner in England is quite different from the system followed by the American Iris Society for the American award. In England the medal is awarded to a new seedling, while here it is given in conformity with the "Policy of Awards," and the iris is chosen from Award of Merit winners of a three-year period.

The following awards have been made to date:

1927

England.	MARGOT HOLMES.....	Raised by Amos Perry
France.	(No award)	
America.	SAN FRANCISCO.....	" " William Mohr

1928

England.	(No award)	
France.	PLUIE D'OR.....	" " Cayeux et Le Clerc
America.	(No award)	

1929

England.	JOYANCE.....	" " Mrs. K. Dykes
France.	VERT GALANT.....	" " Cayeux et Le Clerc
America.	DAUNTLESS	" " C. P. Connell

1930

England.	G. P. BAKER.....	" " Amos Perry
France.	DÉPUTÉ NOMBLOT.....	" " Cayeux et Le Clerc
America.	(No award)	

1931

England.	GUDRUN	" " Mrs. K. Dykes
France.	JEAN CAYEUX	" " Cayeux et Le Clerc
America.	(No award)	

1932

England.	(No award)	
France.	ECLADOR	" " Cayeux et Le Clerc
America.	RAMESES	" " H. P. Sass

1933

England.	(No award)	
France.	ALICE HARDING.....	" " Cayeux et Le Clerc
America.	CORALIE	" " Dr. W. M. Ayres

1934

England.	GOLDEN HIND.....	“	“ H. Chadburn
France.	MME. LOUIS AUREAU.....	“	“ Cayeux et Le Clerc
America.	(No award)		

1935

England.	SAHARA.....	“	“ G. L. Pilkington
France.	MME. MAURICE LASSAILLY....	“	“ Cayeux et Le Clerc
America.	SIERRA BLUE	“	“ Prof. E. O. Essig

1936

England.	(No award)		
France.	OLYMPIA.....	“	“ Cayeux et Le Clerc
America.	MARY GEDDES	“	“ T. A. Washington

1937

England.	(No award)		
France.	NICOLE LASSAILLY	“	“ Cayeux et Le Clerc
America.	MISSOURI	“	“ J. H. Grinter

1938

England.	(No award)		
France.	ANTIGONE.....	“	“ René Cayeux
America.	COPPER LUSTRE.....	“	“ Dr. J. H. Kirkland

1939

England.	(No award)		
France.	(No award)		
America.	ROSY WINGS	“	“ L. M. Gage

1940

England.	WHITE CITY	“	“ Mrs. Olive D. N. Murrell
France.	(No award)		
America.	WABASH	“	“ Mary Williamson

1941

England.	MABEL CHADBURN	“	“ H. Chadburn
France.	(No award)		
America.	THE RED DOUGLAS.....	“	“ J. Sass

1942

England.	(No award)		
France.	(No award)		
America.	GREAT LAKES.....	“	“ L. W. Cousins (Canada)

1943

England.	(No award)		
France.	(No award)		
America.	PRAIRIE SUNSET	“	“ H. P. Sass

AWARD OF MERIT

Tall Bearded (except where otherwise noted)

1938

<i>Variety</i>	<i>Originator</i>
AMIGO (<i>Int.</i>)	Williamson
AT DAWNING	Kirkland
AUBANEL	Cayeux
CHEERIO	Ayres
CHRISTABEL	Lapham
GOLDEN BOW (<i>Int.</i>)	H. P. Sass
GOLDEN TREASURE	Schreiner
JELLOWAY	Parker
OZONE	J. Sass
SAHARA	Pilkington
SIEGFRIED	H. P. Sass
WABASH	Williamson

1939

ANGELUS	Egelberg
CHINA MAID	Milliken
CHOSEN	White
CITY OF LINCOLN	H. P. Sass
E. B. WILLIAMSON	Cook
EXCLUSIVE	Grant
GRACE MOHR (<i>Hybrid</i>)	Jory
LOUVOIS	Cayeux
MOUNT CLOUD	Milliken
MME. LOUIS AUREAU	Cayeux
MME. MAURICE LASSAILLY	Cayeux
SOUTHLAND (<i>Int.</i>)	H. P. Sass
THE RED DOUGLAS	J. Sass

1940

CAMEROUN	Cayeux
FAIR ELAINE	Mitchell
FLORENTINE	Cayeux
FRANK ADAMS	Lapham
GREAT LAKES	Cousins
GOLDEN MAJESTY	Salbach

1940 (*Continued*)

<i>Variety</i>	<i>Originator</i>
LIGHTHOUSE	Salbach
MATTERHORN	J. Sass
MOUNT WASHINGTON	Essig
ORMOHR (<i>Hybrid</i>)	Kleinsorge
SABLE	Cook
SOME LOVE (<i>Hybrid</i>)	White

1941

ALASTOR	Spender
ATHALA	Cayeux
ELSA SASS	H. P. Sass
MING YELLOW	Glutzbeck
NADA (<i>Hybrid</i>)	Giridlian
OLD PARCHMENT	Kleinsorge
OYEZ (<i>Hybrid</i>)	White
PRAIRIE SUNSET	H. P. Sass
RED GLEAM	Lapham
RUTH POLLOCK	H. P. Sass
SNOW FLURRY	Rees
YELLOW JEWEL	Smith

1942

ARCTIC	Kleinsorge
BALMUNG	H. P. Sass
CAROLINE BURR	Smith
DEEP VELVET	Salbach
GOLDEN FLEECE	J. Sass
GOLDEN SPIKE	Whiting
HELEN ASTOR (<i>Sib.</i>)	Whitney
MELITZA	Nesmith
PINK RUFFLES (<i>Int.</i>)	Smith
SPUN GOLD	Glutzbeck

1943

BLACK HAWK (<i>Int.</i>)	Schreiner
BROWN THRASHER	Kirkland
CAPTAIN WELLS	Paul Cook

1943 (*Continued*)

<i>Variety</i>	<i>Originator</i>
COPPER ROSE	Paul Cook
DAYBREAK	Kleinsorge
GARDEN FLAME	H. P. Sass
MARY E. NICHOLLS	Nicholls
NELSON OF HILLY (<i>Hybrid</i>)	C. White
PESHAWAR (<i>Hybrid</i>)	Schreiner
RED VALOR	Nicholls
STARDOM	D. Hall
TIFFANY	H. P. Sass
VIOLET SYMPHONY	Smith

HONORABLE MENTION

Tall Bearded (except where otherwise noted)

1938

<i>Variety</i>	<i>Originator</i>
ALLUMEUSE	Gage
ANGELUS	Egelberg
CHINA MAID	Milliken
CHOSEN	White
E. B. WILLIAMSON	Cook
ETHEWYN KLEITZ	Gage
FRANK ADAMS	Lapham
KEEPSAKE (<i>Dwarf</i>)	Cook
MATTERHORN	J. Sass
MAYLING SOONG	Lewis
MING YELLOW	Glutzbeck
MISS CALIFORNIA	Salbach
RADIANT	Salbach
TAMPA (<i>Dwarf</i>)	Cook
THE BISHOP	Washington
TIFFANY	H. P. Sass
TRIPTYCH	Wareham

1939

<i>Variety</i>	<i>Originator</i>
ANSWER	White
BLUE SPIRE	Milliken
BRONZINO	Salbach
CALIFORNIA TREK	White
CHAMPAGNE GLOW	Washington
CORONET	D. Hall
ELSA SASS	H. P. Sass
FAIR ELAINE	Mitchell
GALLANT LEADER	Weisner
GLEN ELLEN	Connell
GOLDEN MAJESTY	Salbach
GREAT LAKES	Cousins
MATULA	H. P. Sass
MAY DAY	D. Hall
MONADNOCK	Salbach
MORNING SONG	White
MOUNT WASHINGTON	Essig
MRS. SILAS WATERS	Ayres
NADA (<i>Hybrid</i>)	Giridlian
ORMOHR (<i>Hybrid</i>)	Kleinsorge
RED BONNET	Gage
ROOKWOOD	Wareham
ROYAL COACH	H. P. Sass
RUTH POLLOCK	H. P. Sass
SNOW FLURRY	Rees
SOME LOVE (<i>Hybrid</i>)	White
SONG OF GOLD	Essig
SPUN GOLD	Glutzbeck
STELLA POLARIS	Smith
SYMBOL	White
THELMA JEAN	Peck
TREASURE ISLAND	Kleinsorge
YELLOW JEWEL	Smith

1940

<i>Variety</i>	<i>Originator</i>
AZTEC COPPER	Kleinsorge
BALMUNG	H. P. Sass
BONNIE LASS (<i>Int.</i>)	Douglas
BROWN THRASHER	Kirkland
BUTTERCUP LANE	Hall
CAROLINE BURR	Smith
DUBROVNIK	Williamson
EDWARD LAPHAM	Lapham
FLORA CAMPBELL	Hill
GARDEN FLAME	H. P. Sass
GOLDEN FLEECE	J. Sass
GOLDEN SPIKE	Whiting
INVICTUS	Hall
LORD DONGAN	Smith
MARY E. NICHOLLS	Nicholls
MELITZA	Nesmith
MOON MIST	Washington
OLD PARCHMENT	Kleinsorge
OYEZ (<i>Hybrid</i>)	White
PATRICIA	H. P. Sass
PINK RUFFLES (<i>Int.</i>)	Smith
RED GLEAM	Lapham
RED VALOR	Nicholls
SHAWANO	Williamson
SONNY BOY	Kirkland
STAINED GLASS	Wilhelm
STARDOM	Hall
SUNDANCE	Nesmith
THE ADMIRAL	Hall
THE DARB	Grant
THE GUARDSMAN	Grant
VIOLET SYMPHONY	Smith
WEST POINT	Nicholls
WHITE PRINCE	Douglas

1941

<i>Variety</i>	<i>Originator</i>
ARCTIC	Kleinsorge
BRONZSPUR (<i>Spuria</i>)	Nies
CALIFORNIA PEACH	Salbach
CHRYSOLITE	White
DAMERINE	Gage
DEEP VELVET	Salbach
FORT KNOX	Milliken
HELEN ASTOR (<i>Sib.</i>)	Whitney-Kellogg
ICY BLUE	Weed
LANCASTER	Cook
MELANIE	Hill
MIRABELLE	Whiting
MISSOURI NIGHT	Callis
MOUNTAIN SKY	Milliken
NELSON OF HILLY (<i>Hybrid</i>)	White
NOEL	White
PESHAWAR (<i>Hybrid</i>)	Schreiner
PHOEBE	Douglas
SAMOVAR	Hall
SMOLDER	Nicolls
SPRING SECRETARY	White
SALAR	DeForest
SAUGATAUK (<i>Spuria</i>)	Nies
STORM KING	Nicholls
SUNSPOT	Grant
TITIAN LADY	Douglas
WAKARUSA	Lapham

1942

AND THOU	Graves
BLACK HAWK (<i>Int.</i>)	Schreiner
BLUE SHIMMER	J. Sass
CAPTAIN WELLS	P. Cook
CEDAR ROSE	Whiting
CHICORY BLUE	Douglas
COPPER PINK	Kellogg
COPPER ROSE	P. Cook
CORAL MIST	Grant

1942 (*Continued*)

<i>Variety</i>	<i>Originator</i>
DAYBREAK	Kleinsorge
DISPLAY	Grant
ELMOHR (<i>Hybrid</i>)	Loomis
FLORA ZENOR	J. Sass
FRANCONIA	Graves
GOLDEN EAGLE	Hall
INDIANA NIGHT	P. Cook
LADY NAOMI	Fay
LATE SUN	DeForest
L. MERTON GAGE (L-8)	Lapham
MARY VERNON	McKee
MELLOWGLOW	Whiting
MOUNTAIN LAKES (<i>Sib.</i>)	Gersdorff
PERSIAN PRINCE	H. P. Sass
PINK REFLECTION	P. Cook
PRINCE OF ORANGE	Kleinsorge
RAEJEAN	Whiting
RUBY GLOW (<i>Int.</i>)	Schreiner
SNOW CARNIVAL	Graves
SNOW VELVET	H. P. Sass
TAPESTRY ROSE	D. Hall
TISHOMINGO	Caldwell
WINTER CARNIVAL	Schreiner
YELLOW GLORY	Smith

1943

ALBA SUPERBA	J. Sass
ADVENTURE	Grant
AZURE SKIES	Pattison
BRIGHT MELODY	Snyder
DOWN EAST	Tobie
ETOILE D'OR	Douglas
FIRECRACKER	Hall
GRAND CANYON	Kleinsorge
HOOSIER SUNRISE	Lapham
JOY (<i>Int.</i>)	Carpenter

1943 (*Continued*)

<i>Variety</i>	<i>Originator</i>
LOS ANGELES	Mohr-Mitchell
MANDALAY	Hall
MOONLIT SEA	J. Sass
MINNIE COLQUITT	H. P. Sass
MOONLIGHT MADONNA	J. Sass
MAJENICA	P. Cook
MULBERRY ROSE	Schreiner
NIGHTFALL	Hall
OLA KALA	J. Sass
PRISCILLA	Whiting
REMEMBRANCE	Hall
ROSE TOP	H. P. Sass
RED AMBER	Loomis
SHERIFFA (<i>Hybrid</i>)	White
SUNSET SERENDADE	J. Sass
STARLESS NIGHT	J. Sass
SHARKSKIN	Douglas
VATICAN PURPLE	Whiting
WHITE WEDGEWOOD	Grant

A. I. S. MEDAL AWARDS FOR 1944

■ BY A VOTE of the directors of the A. I. S., Mr. Charles E. F. Gersdorff was recently awarded a medal for distinguished service to the Society. This is in recognition of his painstaking work as Registrar from the very beginning of the Society in 1920 to the present time, a position which he has filled faithfully and with outstanding efficiency.

At the same time the board decided to award three more medals for achievement in hybridizing. These were given to Dr. P. A. Loomis, Mr. Carl Salbach, and Prof. E. O. Essig.

Dr. Loomis' earlier iris, BLUE VELVET, CHROMYLLA, and MOROCCO ROSE, attained wide prominence. In recent years he has been chiefly noted for developing the strain of "Seashell" pinks, the variety RED AMBER, and the magnificent hybrid iris ELMOHR.

Mr. Salbach's hybridizing efforts have long been crowned with success. Some of his outstanding contributions are GOLDEN MAJESTY, DEEP VELVET, BRUNHILDE, ELEANOR BLUE, RADIANT, LIGHTHOUSE, BRONZINO, and MONADNOCK.

Prof. Essig's work has been largely identified with the development of white iris such as EASTER MORN and MOUNT WASHINGTON, and such famous blues as SHINING WATERS, PALE MOONLIGHT, and SIERRA BLUE. More recently he has worked on a strain of attractive light yellow varieties resulting in GOLDEN MADONNA, MISSION MADONNA, and CALIFORNIA MADONNA.

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OF

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Notes

Notes

BULLETIN
OF THE
AMERICAN IRIS SOCIETY

AUGUST, 1944

No. 94

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THE AMERICAN IRIS SOCIETY

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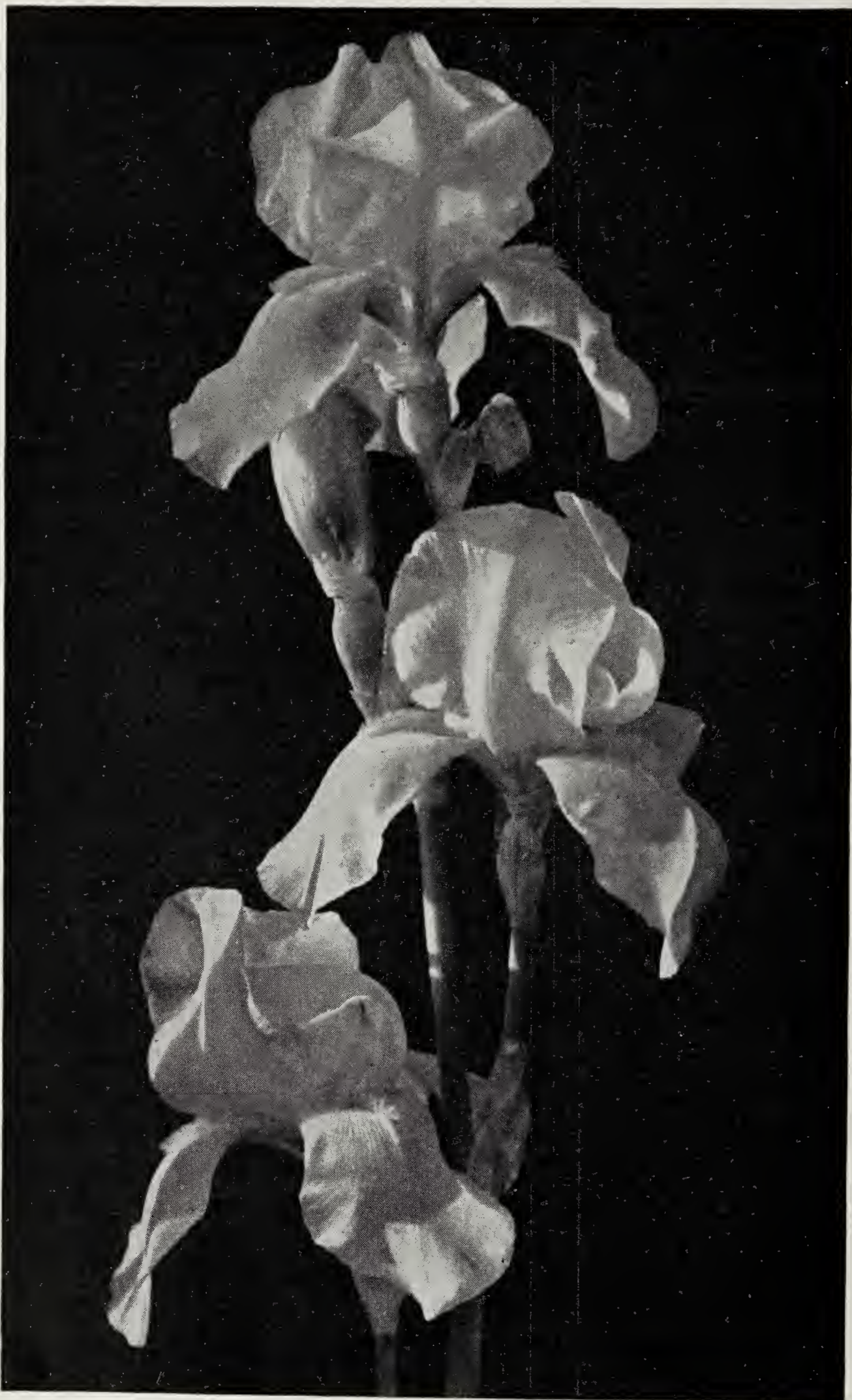
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■ This late summer BULLETIN is devoted as usual to the announcement of A.I.S. awards and accounts of the iris season in various parts of the country. Pilgrimages to iris plantings by members of the Society necessarily being limited by wartime travel restrictions, the stories of new iris seen and comments thereon do not cover as many different gardens as in the past. However, it is gratifying to note that our breeders still do manage to carry on, giving us many fine new originations despite the demands on them through added wartime duties.

Our president, Jesse Wills, made a "goodwill" tour to as many gardens as possible during iris season and has contributed a fine article about the best varieties observed during his trip. Others participating in this BULLETIN with sectional comments and descriptions are William J. McKee, John Dolman, Jr., Stedman Buttrick, Mrs. Thomas Nesmith, Frederic M. Hanes, Mrs. Lena Lothrop, and Ralph M. Schroeder. In addition, we have a survey of the iris season in England by N. Leslie Cave.

The Editor is duly appreciative of the many kind letters sent in by readers approving the contents of the May beginners' BULLETIN, and he welcomes the numerous suggestions they contain. He is especially indebted to J. Marion Shull for his analytical and understanding article in this issue, which answers many of the queries that have been put to us by beginners as to why the American Iris Society functions as it does.

F. W. CASSEBEER, *Editor*



F. W. Cassebeer

*Spun Gold, Mr. Glutzbeck's superb yellow, winner of the
1944 Dykes Medal award.*

AMERICAN IRIS SOCIETY AWARDS, 1944

DYKES MEDAL

Winner

Variety
Spun Gold

Originator
Glutzbeck

AWARD OF MERIT

Tall Bearded

LOS ANGELES
BLUE SHIMMER
THE ADMIRAL
INDIANA NIGHT
GRAND CANYON
PINK REFLECTION
SNOW CARNIVAL
MULBERRY ROSE
FLORA ZENOR
FORT KNOX
PRINCE OF ORANGE
REMEMBRANCE
TISHOMINGO

Mohr-Mitchell
J. Sass
Hall
P. Cook
Kleinsorge
P. Cook
Gravés
Schreiner
J. Sass
Milliken
Kleinsorge
Hall
Caldwell

Other Than Tall Bearded

ELMOHR
MOUNTAIN LAKE

Loomis
Gersdorff

HONORABLE MENTION

Tall Bearded

(7 Votes Required)

Variety
ANNE NEWHARD
AZURE SKIES
BERKELEY GOLD
CHIVALRY
CLOUD CASTLE
CASA MORENA
DREAM CASTLE
EXTRAVAGANZA
FRANCELIA
FLAMELY
GOLDEN SPANGLE
JASMINE

Originator
Wiesner
Pattison
Salbach
Wills
Graves
De Forest
P. Cook
Douglas
McKee
P. Cook
Cassebeer
Grant

<i>Variety</i>	<i>Originator</i>
JASPER AGATE	Williams
LOUISE BLAKE	Smith
LORI MAY	De Forest
MASTER CHARLES	Williamson
MEXICO	Kleinsorge
NIGHTINGALE	Hall
ORANGE GLOW	Cassebeer
OVERTURE	Hall
RANGER	Kleinsorge
ROYAL SCOT	Hall
SEQUATCHIE	Caldwell
SOLID MAHOGANY	J. Sass
TIFFANJA	De Forest
TOBACCO ROAD	Kleinsorge
BANDMASTER	Hall

Other Than Tall Bearded

(5 Votes Required)

ERIC THE RED	Whitney
LADY MOHR	Salbach

HIGHLY COMMENDED

(5 Votes Required)

<i>Variety</i>	<i>Originator</i>
AZALEA	Nesmith
Caldwell No. 26-44B	
COPPER GLOW	Douglas
EXQUISITE	Nesmith
Fay No. 41-21	
FANTASY	Hall
Hall No. 44-17	
LAKE GEORGE	Smith
LOOMIS No. V-20	
MOUNT HERMON	Lowry
PREMIER PEACH	Hall
REDWYNE	McKee
SOUSUN	Essig
SUN DIAL	Wills
Sass No. 36-41	
SUZETTE	Knowlton
TRUE LOVE	Wills
PURPLE HEART	Tobie

IRIS TRAVELS, 1944

JESSE E. WILLS

■ MR. AND MRS. Geddes Douglas, Mrs. Wills, and I had planned to reach Spartanburg early Sunday afternoon, April 29, but because of a missed train connection we did not get to Mrs. Blake's garden until nearly six o'clock in the evening. The sun was still high, however, and the iris were at their peak. It was a scene typical of a good iris collection at the height of the season. Visitors were milling around the garden and photographers were busy adjusting their gadgets and posing individual blooms for close-ups. The first person we saw was Kenneth Smith, looking very typical in gray slacks and a green sweater, with his pipe in his mouth and an iris gleam in his eye.

The first impression of the garden was overwhelming. Every way we looked iris seemed to be bigger, taller, healthier, and better grown than any we had ever seen before. In a large degree this impression lasted, although some things were not so well grown as others. As a general rule when one has heard anything praised a great deal before seeing it, he is apt to expect too much and be disappointed. The reverse was true in this case. Three Oaks was even more lovely than we expected. We stayed there until the afternoon of the next day and wished that we could have remained longer, but as the season and weather were just right we did not feel that we missed much.

Three Oaks is a lovely home and Mrs. Blake is a wonderful hostess who makes anyone's stay happy, but aside from this the garden by itself is very well worth going to see. It had been hard for me to visualize its layout although I had read descriptions of it several times. The driveway leaves the road and curves up in front of the house, leaving a little narrow stretch of lawn between the driveway and the front entrance and a much larger crescent of lawn on the other side of the driveway. The main part of the "Hall of Fame" extends along the edge of this driveway opposite the house. There are three varieties for each breeder, mostly growing in large clumps fairly close together, but not too close, and with slightly wider intervals between breeders. The drive, with its concrete curb, is below

the level of the lawn, so as one walks along it and looks at the iris, they seem even taller than they actually are, although most of them were growing better than I had seen the same varieties before. The "Hall of Fame" has grown too long for the driveway, so it has had to be extended down a path which goes toward the back and to the left of the house. Between this path and the house there was another planting of iris called "Debutantes and Chaperones." These were very new seedlings or named varieties from many breeders with good slightly older iris to keep them company. Other iris were growing on terraces up closer to the house and to the other side of this path. Another path crossed this at right angles coming from the side entrance of the house and leading down the hill to an arbor. This is the "Rainbow Trail," lined on each side with older iris in varied colors and with climbing roses on columns. Roses and iris were in full bloom together, and in one place in the garden an enormous yellow rose tree or shrub was very attractive surrounded with masses of yellow iris. Looking out from the front doorway across the drive and the "Hall of Fame," one can see a long mass of green shrubbery edging the street, and in front of this were clumps of various white iris which formed Mrs. Blake's "Snowdrift."

The "Hall of Fame" varied in the effectiveness of the individual exhibits, although the idea as a whole is most attractive and unusual. The iris from some breeders are newer than they are from others, and some color combinations were happier.

In Kenneth's niche were YELLOW JEWEL, CAROLINE BURR, and VIOLET SYMPHONY. All three were in full bloom and doing better than I had ever seen them, even in his garden.

I was struck by the fact that many Southern California iris, which are usually too tender for Nashville, were growing beautifully in Spartanburg. SYMBOL was tall and magnificent in a big clump, and FORT KNOX looked very good as a light yellow. Mrs. Blake also had two fine plantings of three of the Essig Madonna iris. GOLDEN MADONNA was the best, I thought. It struck me as a taller, paler edition of GOLDEN FLEECE, a bigger and perhaps broader flower but not so bright. CALIFORNIA MADONNA was a big, tall, pale cream with an uneven wash of lemon yellow over the haft and blade, not going all the way down. MISSION MADONNA to me had the base color of CAROLINE BURR, between gray-white and cream, with yellow on the haft coming down to the tip of the yellow beard.

The Loomis niche was also outstanding with RED AMBER, ELMOHR, and No. TQ-70, now named SPINDRIFT. RED AMBER was a little disappointing, but the other two more than made up for it. ELMOHR was splendid, as it has apparently been everywhere. While I had perhaps expected a little too much of No. TQ-70, I liked it a great deal. It is one of the best of the new "Seashell" pinks from the standpoint of size, form, substance, and branching, and the color is very good with the beard in striking contrast. There are some lines on the haft which detract slightly from it.

In Mr. Wareham's niche I saw JAVA SKY for the first time and liked it. The color reminded me of SEQUATCHIE, except the colors were arranged differently and the shape of the flower was entirely different. Both these iris and many other new blends suggest the color range of breeder tulips, plum mingled with orange, terra cotta, and rose.

Some new varieties that I liked were OREGON TRAIL, which is very bright and distinctive although it could be a little smoother; PEACH GLOW, which is deeper in color than its parent DAYBREAK and less of a self, with not as much copper, and with a blue flush on the fall; and CASA MORENA, Mr. De Forest's new iris. This last was just opening as I left. It had a most unusual and impressive color which is not adequately described by saying that it is between red and brown with the brown predominant. I was not quite so impressed with it as it performed later in Nashville, but its color was still outstanding. JASMINE, from Dr. Grant, was an excellent very smooth yellow on a fine stalk. Two splendid yellow seedlings were Mr. Fay's No. 41-22 and Mrs. Whiting's No. 413.

Among the older iris, clumps of GOLDEN MAJESTY and SHINING WATERS were doing splendidly. In three or four different places AMIGO was growing much taller than I have ever seen it—in fact, so tall that I did not recognize it at first.

New York

I arrived in New York on the morning of May 26 and went straight to the ferry. There was a heavy fog over the harbor so that visibility was almost zero, and when I got to Kenneth Smith's home, I found that a misty rain for two or three days had held the iris back somewhat, but they were approaching their peak and had about reached it before I left there on May 28.

Kenneth's newest seedlings had been transplanted late and there

was practically no bloom among them. He had a great many seedlings, however, from the two previous years which were blooming for the first time, and a large number of his older named varieties were doing magnificently as usual. I was disappointed in not seeing his new cream, COOL HARBOR, which had impressed visitors the previous year. It had been divided and was not blooming. LAKE GEORGE had also been divided; it was short but was blooming well, and I got a very favorable impression of it. It is a blue with very flaring falls, somewhat resembling GREAT LAKES, but a trifle darker. It is not related to GREAT LAKES in any way. LOUISE BLAKE, which I had seen also in Spartanburg and in Nashville, does not grow quite as tall as we hoped it would, but it is still a very fine flower. I think it will be slightly taller than AMIGO as most people will grow them both, and its standards are somewhat lighter. The falls are very broad and rich. RAJAH has the clearest, brightest, yellow standards of any large variegata I know. Most of our new iris in this color class have been blended variegatas with some tan or rose mixed with a yellow in the standards. This is true even of CITY OF LINCOLN. RAJAH is a clear bright yellow in sharp contrast to the dark red falls. When I first saw this iris in 1942, I was impressed but thought it was marred by a pronounced line down the center of the fall. This was not so noticeable this year, and I was glad it was being introduced. After wandering through the new seedlings and looking at the different things, I kept coming back to admire the large plantings of VIOLET SYMPHONY. This is a big splendid iris which never has been appreciated as it should be. I don't know of any other good one in its color class except its parent VIOLET CROWN, and it is entirely different in effect from this.

Kenneth had a tremendous number of plicata seedlings of all sorts and a great many yellows. Of his new seedlings, however, the most interesting cross to me was one from ORANGE GLOW x MATULA. This gave him a number of blends in various shades of rosy brown and red, some selfs, and some bicolors, and it was hard to tell which was the best. No. 4-5, which he has tentatively named ADIRONDACK CHIEF, is a very smooth self of rosy-brown red, light to medium deep in color, with fine branching and good height. No. 4-6 is more of a bicolor, with light gold standards mixed with rose and a blue flush on the falls at the base of the beard. No. 4-43 is a big rose with very broad falls.

Among his plicatas, I liked No. 4-19. It is a ruffled, crimped,

heavily marked blue plicata with good form and substance, and flaring falls, of medium height but with good branching. It is more heavily ruffled, crimped and fluted than any iris I have seen. No. 4-22 resembled MINNIE COLQUITT, with heavier markings so that the standards were practically solid purple. No. 4-25 is a white which he hoped to name FREEDOM. It is tall and ruffled with very broad falls and a wide haft which a yellow beard sets off nicely.

Among the yellows, No. 4-40 looked to be the best if it will only grow a little taller. It is a rugged, sturdy flower with very wide, flaring falls, practically a medium yellow self with a slight suggestion of deeper yellow on the haft. It has excellent substance, a quality often lacking in yellows.

There was a brown seedling that Kenneth liked very much which is practically identical in color with LOUVOIS, but it is larger and the border on the falls is about twice as wide. It was No. 3-11, now named HIS EXCELLENCY.

While I was in New York we made one trip up to Fred Cassebeer's garden, but found his season considerably behind Kenneth's, so that comparatively little was open. CALIFORNIA PEACH was growing better than I had ever seen it. Fred also had two nice seedlings open. The one I liked the better, No. C-31, was a very smooth brown bicolor with considerable contrast between the standards and the falls. The standards were a tawny buff with a greenish suggestion in the tan that was hard to describe. The falls were rich, dark red-brown, without any noticeable edge and with no venations. The beard was the same color as the standards. A sister seedling of this, No. C-28, reminded me of REGAL BEAUTY, with medium violet standards and smooth red-purple falls.

While in New York I was glad to see again Mr. McKee and Mrs. Nesmith, both of whom had visited Nashville, and I was pleased to meet Dr. Randolph, of Cornell, who has developed a most interesting technique for speeding germination of iris seed. I hope very much that he describes this in an article for the BULLETIN.

The day I left New York it turned exceedingly hot and some of the iris began to go down. My host also got hot and went down with 102 degrees of fever. I went away somewhat worried about Kenneth, but it turned out to be only bronchitis, which unfortunately made him miss the latter part of his season.

Chicago

My family went with me to Chicago for a week's vacation on June 6. We were staying out at Highland Park, and on the way there we passed through Wilmette and got a glimpse, from the train windows, of Mr. Hall's "back 80," crowded with visitors and with the iris in full bloom. During the week I was there I visited Mr. Hall's garden four times. This was, however, under worse conditions than I had ever seen it before. There had been a hot spell over the entire country since early May which had rushed his season so that it was already a little past its peak. The day before I arrived there had been a very high wind which had blown over many of even the sturdiest iris. The week of my visit, however, was cool with a good deal of rain. The iris, therefore, were not in the best of condition; some had only the last blooms, and these were weather beaten. Even so, I saw a good deal and thoroughly enjoyed my visit.

The appearance of Mr. Hall's various plantings has changed with the years. At the time of the annual meeting in 1940 the dominant color note was represented by STARDOM, NIGHTINGALE, and THE SENTINEL. There is not so much of this color now, as he is working primarily with his new strain of pinks and then, to a secondary extent, with reds and light and dark blues.

He had so many pink seedlings that they were almost bewildering, and it was hard to determine which were the best. These were second generation pinks coming from "Flamingo" and other shades which popped out in his garden two years ago. Of these OVERTURE and DREAM GIRL had been divided and planted in rows for propagation since they were both being introduced this year. Therefore, the bloom was small and short. They were both very lovely, however, and are the most outstanding introduced iris of this type I have seen. Their outstanding quality is their pinkness and their smoothness. They are both pale pinks after they have opened but they are really pink, not white with a suggestion of pink about them. The buds are much deeper in color than the open flower, and seeing DREAM GIRL about half open gives you an entirely new conception about what pink can be in an iris. Both have the tangerine beards typical of this color class. Neither is especially large nor tall, and I have had a hard time for two years deciding which was the better. DREAM GIRL is a slightly deeper pink and I like its form somewhat better. On the other hand, OVERTURE is

somewhat the taller and may have better substance. Both have fair substance and fair branching. FANTASY is a big ruffled flower of lavender or orchid-pink with a red beard. While its color would not be so unusual except for the beard, it is a lovely flower of good size and substance. It seems to have a tendency to throw an occasional flower with four standards, but I do not consider this a serious defect. PREMIER PEACH is another big, fine flower of a peach color between tan and pink, also with the red beard.

All three of these colors were represented in the new pink seedlings, but most of them were of the "Flamingo" color—that is, they were larger and taller and in some cases pinker editions of OVERTURE and DREAM GIRL. Some had better color than others; some had better form and substance. Quite an argument went on among the visitors while I was there as to whether No. 44-17 or No. 44-33 was the better. No. 44-17 is a deeper pink than OVERTURE, with the reddest beard of all. There was less orange in it than in the other tangerine beards so that it carried the suggestion of carmine red. No. 44-33 is also very pink, with a beard not so intense. It had a very clear, smooth tone of color. The semi-flaring falls were very wide at the end, but they had an hourglass shape, narrowing down at the haft. No. 44-37 had only fading flowers when I saw it, but it interested me because it had a pink beard which harmonized well with the flower. I do not mean by this that the beard was entirely distinct from all others, but it was paler and thinner with less orange and more pink in it. No. 44-30 was not so pink but had the widest haft and the best formed flower. I took down numbers on a good many others that I liked, and there were some good ones that were through blooming before I arrived. All of them were remarkably smooth flowers without the lines or shadings on the haft which have marred some other pink seedlings of this type.

Among other types in Mr. Hall's garden, CHANTILLY is a very ruffled and flared orchid-pink with a yellow beard. No. 44-15 is very dark red. No. 44-39 is a yellow-pink blend with a distinct gold edge. It was also unusual because of the crinkled, crimped edges it had to both standards and falls. The visitors seemed to like very much No. 42-26, a tan of OLD PARCHMENT type but deeper. It had excellent form and substance in a big flower.

Among the named varieties, BANDMASTER, a big light blue had stood up better than almost anything else under the bad weather

it had received. Large plantings of MANDALAY were outstanding because of the unusual bright rose-brown color. STARDOM and NIGHTINGALE were as impressive as usual.

In the "back 40" I noticed a few iris from other people that I had not seen before. TEA ROSE, of Mrs. Whiting's, is a ruffled pink blend which I liked. MOONBEAM, from the Sasses, was a big cream yellow, the standards creamy yellow and the upper part of the falls the same color fading out to a paler cream. It looked good in this color class.

I got over to Mr. Fay's for only a short time one evening after dinner. His garden was even earlier than Mr. Hall's and a lot of things had gone by. He had used pollen from some of Mr. Hall's "Flamingos" two years ago, and this year he had about five pinks out of some two hundred seedlings from these crosses. They resembled Mr. Hall's pinks in their smoothness, but perhaps had a little more peach in them. The one considered the best was not in bloom. No. 44-37 had an unusual combination of colors. The standards were "Seashell pink" and the falls were the same color with a bright yellow overlay on the haft, which with the tangerine beard gave an unusual color combination. I was glad to see again his nice white, KATHARINE FAY. His yellow, which has shown up so well at Mrs. Blake's, was practically through blooming.

A visit to Chicago does not seem complete without seeing Franklin Cook. It was impossible to see him since he is somewhere in the Pacific on a carrier, but we did see his family and his garden. He had only one new seedling blooming, but this one, by sailor's luck, was an exceedingly good one. He has been working for some time for a white with a blue beard. This particular iris was a blue-white, almost pale blue, with good form, stiff flaring falls, and excellent substance. The standards were peculiar in that they were more nearly blue on the inside and more nearly white on the outside. The striking thing about it, however, was that it had the bluest beard I have seen yet. It did not merely suggest blue, it was not blue mixed with white or yellow, it was *blue*. I am not sure that I got the parentage straight, but I believe it came from his older CHELSEA, which has a somewhat blue beard, crossed with WHITE CITY.

At Mr. Hall's it was a pleasure to meet a number of other visitors. Among them were Mr. Lapham, Mrs. Waters, Mrs. Pattison, and Mrs. Hahn. Mr. Lapham reported that he had a number of

new pinks coming from No. TQ-70 and Dr. Mitchell's ISABELLINA. He described them as being a slightly different tone of pink from Mr. Hall's, with perhaps some salmon in them, but they also have a tangerine beard and belong to the same general group.

Looking back on these various visits and the Nashville iris season, I am left with several impressions. A good many fine new iris are coming out, and there have been a number of new color breaks and improvements, particularly in the pinks and blends, but there is still room for improvement in every color class—even in the white and the yellow classes. We have been getting new colors and better colors, but in doing so there has been some sacrifice of form, substance, and branching. There is tremendous room for improvement in substance and strength of stalk. We love iris, but they are a provoking flower under the sort of weather they seem to encounter every year now. I don't think I have ever seen as many iris down on the ground as I saw this year. It was true in Nashville, in New York, and in Chicago. They stood up well at Spartanburg, but the bloom there was over before the extremely hot weather had swept over a good part of the country. Anyway, we can wish for better weather next year as well as for better iris.

NEW ENGLAND IRIS SEASON

STEDMAN BUTTRICK

■ A WINTER which provided virtually no covering of snow and a spring which provided no moisture but gave an abundance of hot sunshine (with some late frosts thrown in for good measure) combined to create difficult conditions for iris everywhere in New England this year. Reports of winter injury were widespread during April. Then the dryness and heat, forcing an exceptionally early bloom, began to take its toll in May, with the result that bloom was well below normal and what there was of it did not last long. The wonder is that the plants looked as well as they did in every garden I was able to visit.

This triumph was nowhere more abundantly demonstrated than at Fairmount, Mrs. Thomas Nesmith's justly famous garden in

Lowell. In view of the many excellent descriptions that have appeared in previous BULLETINS, it is doubtless superfluous to dwell again upon this garden, but it must be stated once more, just for the sake of the record, that Mrs. Nesmith knows iris and she knows how to grow them. One's own struggles could be forgotten here in admiration of the many fine and beautifully grown varieties and the undiminished charm of setting and background.

Mrs. Nesmith is a magician, but even she could not completely dispel the effects of drought and heat, and much of her bloom went all too quickly. None the less, there was so much to look at and delight in that the most critical judges could not have been dissatisfied.

Of surpassing interest was Mrs. Nesmith's own new pink seedling No. 42-3a, subsequently named EXQUISITE. A child of PINK MARVEL and MELITZA, it represents a great advance in its color class. EXQUISITE is a pink (call it Venetian or shrimp or what-have-you) that does not derive from orchid or lavender tones. Technically it is described as between vinaceous and congo pink. I doubt, however, if this description conveys to the mind's eye the delicate and smooth light salmon and peach tints that enrich and warm the flower. The whole effect, including the pinkish beard and the very pink styles and crests, is uncommonly delicate and lovely. The flower is of moderate size and has good substance.

Side by side with EXQUISITE was another remarkable Nesmith seedling, No. 42--2a, which has been named AZALEA. It appeared to me to be somewhat larger than EXQUISITE and to have more ivory or more of MELITZA in it than EXQUISITE. It, too, represents a big forward stride in the pink class.

Another fine seedling was No. 41-17a, now named HEART AGLOW, a cream with an intense coral beard. Toward the end of the season still another fine seedling, No. 43-30, made its appearance. It proved to be a large, well formed and very luminous blend in unusual tones of Van Dyke brown overlaid with rose. "Ravishing" was the word for it. High branching and bunched blooms producing what Mrs. Nesmith called a "feather duster" effect were serious but perhaps not fatal faults. Another and more normal season will probably throw better light on its habits.

Toward the end of the season I saw No. 43-30, Mr. McKee's very fine new yellow, FRANCELIA, in full flower. I liked it a lot last year

and even more this year at Mr. McKee's. It seemed extraordinarily bright and clear, and its semi-flaring form removed all trace of the long-eared look that characterizes many of the yellows. There are larger yellows than *FRANCELIA*, but on the combined count of color, finish, form, and substance, it does not have to take a back seat to any of its rivals.

Mrs. Nesmith had a particularly good showing of many of Mr. Geddes Douglas' introductions and seedlings. His new amoena (an honest-to-goodness amoena, by the way) named *EXTRAVAGANZA* is a very velvety and sumptuous affair, with no venations or haft markings. Its branching is far ahead of that of *WABASH*, and it has more cream in its standards and more copper and red in its deep violet falls. Altogether, it is very stylish and striking.

Another new one from Mr. Douglas was *DIVIDEND*, a big, well-substanced deep yellow. Its color seemed a trifle on the somber side, but one could not complain about its size and form. Growing next to *DIVIDEND* was a very large medium blue Douglas seedling, No. 43-9, with exceptionally broad and rounded standards and falls, giving an attractive and novel-circular effect. I hope it will be introduced.

While on the subject of the introductions of Mr. Douglas, I might say, parenthetically, that at least two of his whites seem to me up among the best although I haven't heard or read much about either of them. *SHARKSKIN* is my favorite, although *NORTHMAN* is very good. Both are far superior to his *TITIAN LADY*, which is seriously lacking in substance. I liked *SHARKSKIN* so much that I made careful comparisons of it with many of the newer whites that were at hand, *ALBA SUPERBA* being a regretted absentee, since it did not bloom for me or for Mrs. Nesmith. Perhaps I am oversusceptible to a lot of flare and starchy substance, but I could not persuade myself to rank *SHARKSKIN* below even such a very good one as Mr. Graves' beautiful *FRANCONIA*, although *Franconia* has a purer haft than *SHARKSKIN*. I must add, however, that my recollection of *ALBA SUPERBA*, as seen last year at Mrs. Nesmith's, leads me to suspect that few whites can stand comparison on all scores with Mr. Sass' massive new introduction.

At Mrs. Nesmith's I had my first view of Mr. Jesse Wills' new deep blue iris named *CHIVALRY* with which our President makes an impressive debut, *CHIVALRY* being, I believe, his first introduction. It has about everything one likes to find in an iris—big, very

sturdy blooms of broad proportions and somewhat ruffled, smooth color, and good branching. Mr. Hall's justly admired deep blue iris, THE ADMIRAL, happened to be growing near CHIVALRY and while the two iris are unlike in size and form, a comparison as to color was inevitable. CHIVALRY seemed a clearer, purer blue with less purple in it than THE ADMIRAL. Both by reason of their depth of coloring lacked the carrying power in the garden picture that was displayed by the medium toned GREAT LAKES and the still lighter PALE MOONLIGHT which also happened to be nearby.

Dr. Grant's new yellow, JASMINE, did not bloom for Mrs. Nesmith, nor did I see Mrs. Tobie's new large pink REVEILLE that is a cross of MELITZA and Mrs. Tobie's CLOVELLY. I also missed Mr. Kenneth Smith's very lovely pale and glistening blue ELLEN that I admired greatly last year. I did have a glimpse, however, on a half-opened bloom, of Mr. Smith's LAKE GEORGE, and what I saw of it made me want to see much more. It looked as if it would be a stunner in the blue group.

Mr. Cassebeer's GOLDEN SPANGLE, which Mrs. Nesmith is introducing this year, was much in evidence, thanks to its brightness (how wonderfully well a good yellow and white stands out) and to its generous outpouring of bloom. It has the makings of one of those iris which is always rewarding in any kind of season and to which one becomes more attached as the years roll by. Prof. Essig's SONG OF GOLD, Mr. Gage's PURPLE GIANT, and Mrs. Nesmith's CATHEDRAL DOME are some of the tried, true, and untouted varieties that come to mind as examples.

Mrs. Tobie's big deep purple self DOWN EAST, which I saw at Mrs. Nesmith's last year, looked this year more than ever-like a top-notch in its class. It's a lustrous and powerful iris of exotic appearance that, to me, suggests a tropic night rather than the coast of Maine where it was bred and brought up.

Another iris at Mrs. Nesmith's that I liked particularly was TIFFANJA, a plicata from Mr. De Forest, a hybridizer who seems to be able to range widely and get excellent results in many sections of the color field. TIFFANJA has what I regard as a great merit in a plicata—it is not too heavily sanded or speckled. Its buff standards and rounded, spreading falls of white edged buff make a very handsome effect.

An iris from California at Mrs. Nesmith's, Mr. Milliken's SERENATA, created a very pleasing impression. It is a quietly-colored

pinkish-toned blend that, in common with Dr. Grant's CORAL MIST and certain other iris of charming yet elusive qualities, may perhaps be best described as ingratiating.

At the garden of Mr. M. J. Barker in Newton, Mass., iris enthusiasts were privileged to see how much may be accomplished in a very small space. Mr. Barker has score upon score of well-grown modern varieties, including many of the newest, in a circular area that to the casual eye seems about big enough for a goldfish pool. Yet, there is no confusion and no sense of crowding. The iris are clearly labeled and afford an excellent opportunity for review and comparison. It is as if a whole catalog had come to life before one's eyes. Mr. Barker's varietal comments interested me very much. He has a keen and critical eye and so broad a knowledge of the good and bad habits of so many varieties that I was astonished to learn that his active interest in iris is of relatively recent date.

The garden of Dr. and Mrs. F. P. Lowry, also in Newton, afforded further opportunities to see many fine, well-grown varieties in a pleasant setting of trees and lawn. Mrs. Lowry's new white iris, MOUNT HERMON, was well past its prime, but it was easy to discern its strong growing and branching habits and the good placement of its extra heavy blooms. It is, I should think, on the cool side of white and will produce a regal rather than a warm effect. Mrs. Lowry had on display some strikingly handsome and beautifully grown seedlings of Prof. Essig's. One in particular, SOUSUN, a cool and refreshing lemon and cream iris, delighted me with its firmness and clean, well-proportioned lines. It had quality written all over it and should be introduced.

Mrs. Lowry was also growing a rich little mahogany red iris from Mr. McKee that had a patina warm and glowing enough to attract the eye of an antique dealer. It looked good, too, in other respects besides color and finish. She also had a fine clump of Mr. Thole's GLACIER BLUE, an iris I had not previously seen. It is well named as to color, has plenty of height and branching, and the gray-blue tones of its well-proportioned blooms are just cool and quiet enough to blend nicely with some of the reds that are so difficult to know how to place properly in a garden scheme.

Another garden, that of Mr. Albert E. Peck, was also revealing as to what could be accomplished with limited space. Among the varieties that impressed me at Mr. Peck's was SILVER SUSIE from

Mr. De Forest. It is a tall, somewhat high-branched, flaring, creamy white. The way in which its stalks and blooms stood up against the gusty wind blowing at the time was remarkable. Mr. Peck's new white SYLVAN BELLE, being introduced by Mr. Gage, had finished blooming, but he had a fine white seedling of heavy substance and splendid form that looked highly promising.

It is always a treat to see and talk with Mr. L. Merton Gage who, although he is by way of becoming the dean of American hybridizers, remains as sprightly and keen as ever. His garden in Natick, Mass., was overflowing with all kinds of nice things, including a new coppery pink blend that he had named for Mrs. Lowry, but Mr. Gage was so enthusiastic about the iris of other hybridizers that I had difficulty in seeing anything of his own. When I admired a highly colored series of his seedlings, he dismissed them abruptly, remarking, "I wouldn't give a nickel for the whole bunch of them." In the course of our conversation, however, I did succeed in eliciting from him the comment that GLORIOLE was a "pretty fair" iris, but further than that he would not go.

One of the high spots this year for New England iris visitors was the garden of Mr. Harold Knowlton in Auburndale, Mass. Attractive and well-kept lawns and paths bordered by iris and lovely old trees and shrubs conspired to make about as restful and agreeable a setting for the enjoyment of Mr. Knowlton's iris plantings as could be imagined. And the iris themselves were a treat. Not even Mrs. Nesmith surpassed Mr. Knowlton's achievements in outwitting the destructive forces that Nature had set against New Englanders this year. I noted variety after variety at the peak of its form, including particularly good clumps of SPUN GOLD, FAIR ELAINE, and DEEP VELVET.

Mr. Knowlton has on past occasions referred very casually to his hybridizing efforts, and his garden visitors this year were in no way prepared for the surprise he had awaiting them in the form of his plicata seedling named SUZETTE. Here is a plicata that impressed all who saw it as being very, very good. Nothing better of its kind that I can recall has come out of New England, and while native pride may be warping my judgment, I am strongly inclined to rank it as the best plicata I have ever seen. In extenuation of so extreme a statement, I should add that much more experienced judges than I were equally enthusiastic. I mentioned earlier how

much I liked TIFFANJA, Mr. De Forest's buff and white plicata. SUZETTE has TIFFANJA's merit of not being too heavily sanded or speckled. Its delicate markings of madder brown serve to set off the very light yellow creaminess of the standards and falls. The flower is large and handsomely proportioned and of heavy substance. Branching was excellent and height around 42 inches. SUZETTE will be introduced next year, and it ought to become a great favorite, not only for its own merits as a superb iris but for its garden value. Both nearby and at a distance, it was as striking as anything in the garden.

Mr. Knowlton had some other good plicata seedlings and also a tall, clear, flaring medium blue that seemed excellent. No longer can Mr. Knowlton's modesty conceal from his friends that he is getting first-rate results in his hybridizing.

Most regretfully I had to forego the pleasure of visiting many New England gardens, including Dr. Graves' in Concord, N. H., Mrs. Tobie's in Portland, Mr. McKee's in Worcester, and Mrs. Corey's in Reading, Mass. So far as my own garden was concerned, growth and bloom were disappointing, but I consoled myself with dreams of future seasons in which sun and moisture would somehow be thermostatically controlled to produce forests of blooms holding their color and form for weeks on end. Some of the newer varieties in my garden prompted me to make the following random jottings. (Only one or two comments based exclusively on the poor 1944 season are included.)

GOLDEN FLEECE. It has never been even half-way good with me, nor have I seen it to advantage elsewhere in New England. Undoubtedly it is a very fine iris judging from the wide acclaim it has received, but with me the falls tuck in and it has a hang-dog, lack-lustre look to it.

MOONLIGHT MADONNA. This one from Mr. Sass is ever so much better with me than GOLDEN FLEECE or than ELSA SASS, to which it has a superficial resemblance. It is a lovely lemony iris full of crispness and coolness.

OLÀ KALA. Another J. Sass iris that I like a lot. It is so intense a yellow that if it were really big it would come close to being too much of a good thing.

LORD DONGAN. One of Kenneth Smith's best. It has great elegance in the best sense of that much abused word. Mr. Smith's introductions, by the way, like those of Mr. Paul Cook, always seem to possess heavy substance, and LORD DONGAN is no exception.

FRANCONIA. A pure and snowy iris that has no serious faults so far as I can discover. I rate it very highly.

MEXICO. I am easily confused by the blends, get their names all mixed up, and by the end of the season I am reduced to a state of stupefaction trying to assemble any thoughts about them. MEXICO was so enormous and heavy that I succeeded in distinguishing it from the others. I liked it for that reason and also for its own solid merits.

ALZA HOLA. On its soft blue color with a suffusion of gold at the throat I should give high marks to this huge iris, but its form with me was disappointing, the falls curling in and under.

PRAIRIE SUNSET. I try to say something nice about this iris every year as a penance for being skeptical about its advance publicity. With me it is ultra dependable and hugely rewarding.

MARY VERNON. A brilliant and exceptionally stout iris with surprisingly good carrying power. It is the best red and gold combination for garden effect that I grow.

VISION FUGITIVE. The only reason I can hit on for the almost complete lack of interest in this one is that it comes so late that most garden visitors never see it. It has a high rating, however, so somewhere there must exist judges who like it as well as I do. Its cream yellow standards, slightly ruffled, and whiter falls of broad and flaring outline make it a vision of loveliness that is far from fleeting, thanks to the extra fine substance of the blooms.

GOLDEN SPIKE. I have a hard time with this one. It won't grow for me, and the richly colored blooms behave erratically. Maybe every grower has some hoodoo variety that defeats all his efforts.

BRIGHT MELODY. A luscious Concord grape in color and a trim, stylish flower. One of the pleasant surprises of the season.

PINK REFLECTION. Under its soft skin of hydrangea pink this one is fortified by Mr. Paul Cook's special brand of alligator hide. He makes his iris tough and lovely, which is the way I like them.

TISHOMINGO. Three years of observing this iris have not altered my original opinion that it is a masterpiece. I rank it among a dozen or so that seem indispensable for all-around garden effect.

WHITE WEDGEWOOD. A blue white of rare smoothness with a contrasting dark blue beard. Blue whites usually leave me cold, but this one has a special distinction of finish and form that appeals to me greatly.

NOONDAY SKY. A nice big light blue with no more than the inevitable amount of lavender in it. Sometimes it seems a little soft, but all in all it has been a highly satisfactory iris with me.

MULBERRY ROSE. The mulberry and brown of this one cause uneasiness with some garden visitors. I have gotten to like a little chocolate sauce on my raspberry ice cream. Stately is the word so far as size and form are concerned. MULBERRY ROSE has become a great favorite with me.

MORE NEW ENGLAND GARDENS

WILLIAM J. McKEE

■ CLIMATIC conditions in New England during the Winter and Spring of 1944 were about as variable as the winds, with the result that iris performance in many gardens was much below normal, while in others there was an abundance of bloom.

“Iris treks” were arranged. Those who have attended our annual mid-summer meetings are familiar with their advantages. Not only do they present an opportunity to renew friendships, but blooming time in the garden is an opportune time to discuss merits of varieties and iris problems.

Our first visit was to the garden of L. Merton Gage at Natick, Mass., on June 3. We found many of the newer iris and a large group of seedlings in bloom. L. MERTON GAGE and HOOSIER SUNRISE, pink blends, were both performing beautifully. WAKARUSA, which is difficult to describe with its radiantly colored red, bronze, and orange tones, was fine. The seedling which attracted most attention was No. 19-39F, now named EDITH LOWRY. It is a blend with standards a fusion of pink and orange, falls hydrangea red with a narrow border of soft brown; semi-flaring falls, deep yellow beard, emphasis on form and finish. A seedling, No. 21-SA, a soft brown blend with a pink tone, was also very creditable.

A visit to the Merry's new spacious garden at Needham was of special interest. The iris were moved to the new location this spring, and it was quite evident that spring planting was not successful for normal iris bloom. There was much discussion as to arrangement for color display.

The garden of Mrs. Lowry at Newton suffered from winter injury with the result that less than 50 per cent bloomed.

PINK REFLECTION (Cook). Performed well and was most impressive, a fine iris.

SOUSUN (Essig). A large white with a lemon center; attracted a great deal of attention.

GLACIER BLUE (Thole). A large light blue on a tall, well-branched stalk; quite distinctive.

Special interest was centered around Mrs. Lowry's new MOUNT

HERMON, a large silvery white of nearly perfect form and leathery substance. The white class is strongly competitive, but this one is outstanding and of excellent quality.

Mr. Barker's garden in Newton includes a fine collection of the newer varieties. They were well grown and beautifully arranged for display. The varieties blooming profusely were MELODY, L. MERTON GAGE, STORM KING, RED GLEAM, SNOW VELVET, SHANNOPIN, and MARY E. NICHOLLS.

A visit to the Knowlton garden at Auburndale at iris time is always a pleasant one, as the garden is beautifully laid out and arranged. Mr. Knowlton can grow iris in the shade of large trees as well as in full sun exposure. Here I saw DAYBREAK at its best, a 40-inch stalk with three perfect blooms, an iris that does not need any advertising; it is fine. There were many named varieties that were performing splendidly, but the highlight of the garden was Mr. Knowlton's beautiful new SUZETTE, a very lovely plicata with great garden value, which is unusual for this class of iris. The standards are palest cream with very faint dots or stippling at the edges, and are firmly held by the strong midrib. The rounded falls are arched and flaring with stippling at the haft of madder brown (Ridgway). The styles are madder brown forming a pleasing contrast to the creamy color of the beard and flower.

The Corey garden at Reading is located on a farm; old trees and portions of old buildings indicate age and very early settlement. Mrs. Corey has arranged her gardens beautifully for display and many of the newer named varieties were performing splendidly. ELMOHR was particularly outstanding.

Mrs. Corey also had a number of very interesting seedlings, the most outstanding of which was No. 41A, a large deep blue-purple self, with beautifully formed blooms and well-branched stalks. This variety was awarded first prize at the seedling show held at the Nesmith garden.

One of the highlights of the season is the yearly informal meeting of the New England Iris Group of The American Iris Society at the Nesmith garden at Lowell, which has the largest collection of named varieties in New England. Members are requested to bring seedlings and a seedling iris show is held. The following varieties were performing beautifully:

SEQUATCHIE (Caldwell). An exceptionally glowing blend of coppery brown with a strong infusion of rose, and a bright blaze of violet in the center of the falls.

SERENATA (Milliken). A beautiful blend of medium pink. The color, form and substance is excellent, and it is thoroughly hardy in New England.

TIFFANJA (De Forest). A most attractive plicata of colonial buff margined with stipplings of light brown; tall and exceptionally well branched.

SOLID MAHOGANY (Jacob Sass). Bloomed on first-year plants so could not judge the height of stalk, but the deep brown-red flowers are well formed and held their color well even in the hot, dry weather.

INGRID (Harold I. Johnson). Although a first-year plant, showed good promise. It is a pale wistaria blue with cream overlay on the haft of the falls and in the throat of the flower, a pleasing and unusual combination of color.

CHIEF POKING FIRE (De Forest). A brilliant but different red.

RIO ORO (De Forest). A bright brown gold.

Seedling No. 3-41 (De Forest). Very flaring form and rich gold coloring.

GOLDEN SPANGLE (Cassebeer). A cream and yellow, was in full flower. Gives a glowing mass of color in the garden; also, it always blooms, which is a great asset in any iris.

BLACK AND GOLD (Kleinsorge). Bloomed on a good height stalk and seemed like a much improved CASQUE D'OR.

MEXICO (Kleinsorge). A very interesting iris, very large blooms in the blended tones of golden buff and red brown, late flowering; on a first-year plant the stalk was short, but if it grows up, it will be most satisfactory.

FRANCONIA, NORTHMAN, and LADY BOSCAWEN. Three whites that bloomed well this year and it is difficult to say which is the best for they are entirely different in form of flower and blooming season.

DOWN EAST (Mrs. Tobie). A decided improvement over most of the very dark purple iris; not only is it well formed, but the substance is excellent. It is one of the parents of her new one, PURPLE HEART, and this is the blackest iris I have seen.

LOUISE BLAKE (Smith). Especially nice this year; although not tall, it has great beauty in the contrasting colors of standards and falls.

No. 41-22 (Washington). A pale blue and white reverse bicolor with a frosty sheen enveloping the whole flower, heavy substance.

No. 12-41 (Washington). Now named DESERT MOON. A tall and stately cream yellow, very similar in color to FAIRY LUSTRE, but is late flowering and does not commence blooming until FAIRY LUSTRE is finished.

CHIVALRY (Wills). A medium blue self, deeper in color than GREAT LAKES; large, well proportioned blooms of excellent substance.

CARILLON (Wills). A beautiful blend of pink and honey yellow, with a sparkling finish; late flowering; very heavy substance.

AMANDINE (Douglas) No. 43-11. A very large pale cream that is a beautifully ruffled flower of heavy substance; late flowering.

COVER GIRL (Douglas) No. 42-P10. A heavy substantanced pale buff with a faint flush of lavender-pink on the falls.

RESOLUTE (Grant). A tall deep brown-red (no purple in it) with very smooth finish, a fine iris.

ELLEN (Smith). A very pale blue, flaring flowers, and glistening finish.

MARY VERNON, JAVA SKY, REMEMBRANCE, THE ADMIRAL, FIRECRACKER, MAIDEN BLUSH, DISPLAY and ERIC THE RED were others that bloomed well.

The real highlights of the garden, however, were Mrs. Nesmith's new Congo pink seedlings:

EXQUISITE. A self between light Congo pink and buff pink (Ridgway). The flowers are medium in size but beautifully formed with domed and firmly held standards and semi-flaring falls. The whole flower is pink with an enveloping luminous flush; styles and crests, deeper in color; even the beard is pink. Smoothly finished and firm substance with no venations. A very fine addition to the pink class.

AZALEA. A self of Azalea Pink (Royal Horticultural Society *Color Chart*). A little lighter in color than EXQUISITE, but with the same smooth finish and absence of venations. The standards are highly domed and firm, the falls semi-flaring. The center of the flower is a little lighter in tone, and the whole flower is enlivened by the coral pink beard. EXQUISITE and AZALEA are descendants of MELITZA.

HEART AGLOW. A smoothly finished pale cream self with well-domed standards and flaring falls. The whole flower has good substance and the deep peach red (Ridgway) beard gives a glowing center to the bloom. Firm substance and no venations.

Mr. Buttrick at Concord, Mass., has a series of most attractive gardens, specializing in iris and delphinium. The iris varieties performing in fine condition were:

CORAL MIST. Dr. Grant's fine pink blend. This one looks better each year.

SHARKSKIN. Well named; a very finely formed white with a silken finish.

MARY VERNON. A two-year plant; had six tall, well-branched firm stalks; large blooms; a grand performance.

TISHOMINGO. A very handsome iris, large blooms, most colorful.

VISION FUGITIVE. A large cool white and yellow with ruffled standards; appears to be a splendid performer.

JOMAR. The first time I have seen it bloom outside of its home garden; emphasis on graceful form, smooth finish, and elusive coloring.

THE ADMIRAL. Clear, medium blue; a fine addition to this color class.

PRAIRIE SUNSET. Usually this variety has bloomed on short stalks in New England, but an established clump in Mr. Buttrick's garden gave a grand performance.

Dr. Graves' garden at Concord, N. H., suffered the most severe winter damage of any of the New England gardens. Many varieties did not bloom, others bloomed on short stalks, but those that did survive injury bloomed beautifully.

THE ADMIRAL, TOBACCO ROAD, and RANGER. All bloomed on normal stalks and made a splendid showing.

LADY BOSCAWEN, FRANCONIA and two sister seedlings of LADY BOSCAWEN. All bloomed on tall, well-branched stalks. These whites are all outstanding and evidently very hardy as they withstood a very trying winter.

HELEN MCGREGOR. A fine ruffled light blue that was so outstanding in 1943; duplicated its performance in 1944; a very fine iris.

MRS. JACK. A splendid apricot blend that does not fade.

CLOUD CASTLE. A light blue and one of the parents of HELEN MCGREGOR; a fine performer.

Mrs. Tobie's garden located on Cape Elizabeth at Portland, Me., is the last garden to bloom in New England. We visited here in June 15. It is spacious and surrounded by a dense hedge of evergreens which grow so vigorously in Maine. The garden includes a large collection of named varieties and seedlings. The named varieties are mostly grown in large clumps, and the plantings are arranged for color display.

CLOVELLY. One of her introductions, a white with a blue cast. It blooms on a tall, well-branched stalk, and the blooms are the heaviest substance of any iris I know. Mrs. Tobie has used this iris as a seed parent. One of its offspring, REVELLE, is the result of a cross between CLOVELLY and MELITZA, and has not only an intense tangerine beard, but also carries CLOVELLY's heavy substance and well-branched bloom stalk.

PURPLE HEART. Mrs. Tobie's new seedling and the highlight of her garden. This is the blackest purple iris I have ever seen. The standards are Fluorite violet, highly domed and firmly held. The falls are semi-flaring of raisin black with undertone same color as the standards. Beard bronzy purple; almost a self except for the extreme velvet of the falls. The raisin black extends way down into the throat of the flower. Very firm heavy substance, and the flowers have great lasting qualities. One of the three most outstanding new iris I saw this season.

BROWN BUTTERFLY, a dark brown self with light blue marking in the center of the falls, and SHANUNGO BRONZE, a coppery bronze with an orange undertone which glows in the sunshine, were other new seedlings.

My garden at Worcester, Mass., suffered severely from winter injury, but these are my observations:

Hall Seedling No. 4207. A "Flamingo" pink seedling, not to outstanding as the one he has introduced and named OVERTURE. The color, however, is similar; it is real pink and fades very slightly in the sun. Judging from the remarks of the visitors, this color that is destined to become very popular in Irisdom.

GOLD MEDAL (Fay). An early blooming, medium yellow that bloomed ahead of all tall bearded varieties in my garden. A splendid performer in every way. Great garden value in that it lengthens the blooming season several days.

LIGHTS ON (Lapham). A new red from Mr. Lapham's garden similar

to, but a more uniform clear color than, RED GLEAM, the blooms also of better form and finish. Mr. Lapham has produced many good reds, but I consider this one of his best to date.

FRANCELIA. A bright clear yellow, which bloomed so beautifully and was considered so outstanding in 1943, duplicated its performance in 1944 and afforded a good opportunity to make further comparisons with many of the newer yellows.

DIANTHA. A large beautifully formed dianthus pink self. A new color tone in the pink class, yellow beard flushed pink; a MIOBELLE seedling, and the wide branching, form, and substance of the parent has been transmitted to its offspring.

REDWYNE. A red self with a bright mahogany red tone that carries well in the garden. Special emphasis on color.

Other gardens visited included Mr. Carruth's and Mr. Butterworth's at Worcester and Mr. Peck's at Framingham, Mass.

NASHVILLE OBSERVATIONS

MRS. THOMAS NESMITH

■ SPRING never seems complete without a visit to the Nashville Iris Gardens. When I arrived there on May 9, they were just emerging from a few days of cold, rainy weather that culminated in a frost. Due to this, for the first day or two the opening buds seemed pinched and cold as if discouraged, and with half a mind not to open, but after that they burst into their full glory and put on a wonderful show.

The exhibition garden of our president, Mr. Jesse Wills, as usual had a fine collection of the newer varieties from many other hybridizers, and this gave the judges the opportunity of seeing and rating many of the best iris. Some that bloomed especially well were CASA MORENA (De Forest), a big bold flower of glistening golden brown which showed great promise on a first-year plant; ALEPPO PLAIN (Jacob Sass) and FIRECRACKER (David Hall), both of which are very brilliant reddish plicatas, with FIRECRACKER a bit the brighter of the two.

GOLDEN FLEECE was in full flower, and it was the first time I had ever noticed the decidedly brownish tan coloring of the buds. MULBERRY ROSE and MINNIE COLQUITT were blooming in large clumps, both tall and spectacular, but they need neutral colors planted by

them; perhaps white would be best. TOBACCO ROAD is very rich in color, but not a tall variety. DAYBREAK was in full flower, and is one of the best blends. REMEMBRANCE was in fine condition, but the color seemed a bit different than in my garden, probably due to soil conditions.

In the originations of Mr. Wills, CHIVALRY was highly praised by all garden visitors and judges. It is a beautiful medium blue self of ruffled form and heavy substance, and a great addition to the blue group.

CARILLON is a warm blend of pink and honey yellow with the yellow predominating. It is one of the varieties on which the flowers open slowly, and the blooms do not reach full perfection until the second day, a very good feature for such flowers have great lasting qualities.

TRUE LOVE (No. 21-42), which was named this year, is a very smoothly finished flower of almost salmon pink with a bright gold beard; the branching and placing of the blooms is excellent.

SUN DIAL (No. 199-2-41) is another of Mr. Wills' iris that I liked especially well, not only for its rich Indian yellow and tan color, but for its long blooming season and trim jaunty form.

SNOW CRYSTAL (No. 24-42), also named this season, is a lovely and unusual blue and white plicata with the white predominating. In my notes of last year I spoke of this one and mentioned how entirely different it was from other plicatas.

In the numbered seedlings, the following impressed me as being worthy of special mention: No. 57-43, a very attractive iris of bright golden copper and brown, and No. 9-44, a cross of FLORA ZENOR and MELITZA, a light pink self with a faint flush of mauve-buff on the falls; a very bright tangerine pink beard lights up the whole flower, which is tall and well branched, and the blooms remain fresh and do not fade for three days.

Two seedlings that fascinated me were No. 32-42 and No. 6-44. They were from a cross of OLD PARCHMENT $\times$ MAY DAY; both had more pink in them than OLD PARCHMENT, and had splendid substance and flaring form. Others that I liked were two rosy red seedling, No. 27-43 and No. 14-43. The first is in the same color tones as RED AMBER, but the flowers were better formed. Then No. 31-42, a light rose purple that might be termed a smoother MONADNOCK, attracted quite a bit of attention.

In the Washington garden very few of the last year seedlings bloomed, so I cannot give a report on the success of Mrs. Washington and Mrs. Reckless in carrying on the breeding work of Mr. Washington, but there were four seedlings that were well worthy of special mention.

No. 41-22 is a reverse bicolor of pale blue and white with a frosty sheen enveloping the whole flower, beautifully formed blooms with especially heavy substance; No. 39-96 is a very pure white self of medium size with crisp, firm substance, not tall but with three flowers opening at one time in a cascade effect; No. 41-3 is a light wistaria blue with great purity of color, a self of trim, neat form and delicious fragrance; No. 41-26 is a very velvety deep yellow of medium size, which had been replanted and the bloom stalks were not tall, but it certainly has more velvet on the falls than any other yellow that I have seen.

DESERT MOON (No. 12-41), named this season, is a tall and stately cream yellow with full ruffled flowers of extremely smooth finish and heavy substance, and especially fine branching; the color is similar to that of FAIRY LUSTRE, and, as it is late flowering, it carries on this lovely color throughout the season.

CASA BLANCA is rather late flowering and lived up to the beauty and purity of color that so many of us remember in the year of its first blooming, an exceptionally fine white.

While LEILANI did not bloom in the Washington garden, I feel it should be mentioned in connection with this garden for it was the handiwork of Mr. Washington and is the most beautiful orange-pink that I have seen. It bloomed perfectly in the gardens of Mr. Wills and Mr. Douglas and was the center of attention, but to me an interesting thing was that at Mr. Wills' it had an orange cast, while in the garden of Mr. Douglas it was decidedly pink in tone; probably the difference in soil was the reason.

Mr. Wentworth Caldwell has many of the newer iris from other hybridizers in his exhibition garden, but he is more interested in breeding and creating new varieties, and in this he is most successful.

I noticed in his show garden several of the tall, large-flowered iris had stakes beside them that extended well above the topmost bloom, and as I could see they were not there for support of the stalks, I asked the reason. Mr. Caldwell replied that the birds had

been trying to alight on the topmost bloom with disastrous results, and shortly afterwards I saw an example of the havoc they could cause, for a good-sized bird swooped down on a tall, unprotected stalk of his beautiful wistaria blue iris TISHOMINGO, shredding the standards badly with its claws. We had a good deal of fun with Mr. Caldwell about growing iris so large and tall that the birds mistook them for trees. Each year I am more and more impressed with the beauty and stability of TISHOMINGO; it always blooms, and remains firm in wind and heat.

Of the iris already introduced from Mr. Caldwell, SEQUATCHIE was in full bloom. It is a most brilliant coppery blend whether viewed as a specimen stalk or for garden effect.

Mr. Caldwell had more bloom in his first-year seedlings than any of the other hybridizers in Nashville and there were some of outstanding merit. There were four named this year. No. 73-42 is the white that has been praised so highly for the last two years; it is now named COTILLION, and seemed even better than in previous years. No. 26-44B, named SAINT REGIS, is a very light blue self with broad, full, ruffled standards and falls. The delicious fragrance, purity of color, and extremely smooth, firm texture give this iris a decided charm. No. 31-43, named SUMMERTIME, is the finest rich deep yellow that I have seen, and it attracted the attention of all the judges and garden visitors. It is a self with large, flaring flowers of very strong, smooth substance evenly spaced on tall four-way branching stalks. In color it is much deeper and more brilliant than GOLDEN HIND. No. 31-44, named CHAVANON, is most unusual and resplendent in color. A deep Tyrian rose self with firm flaring flowers and tall well branched stalks, it stood out as the brightest iris in his seedlings.

Others that I liked in his seedlings were No. 38-44A, a very rich golden brown; No. 57-44, a larger, taller, smoother GOLDEN MAJESTY; No. 48-44, a lovely pink blend; 26-44A, a very clear medium blue with firm, rounded flowers and fine branching.

The garden of Mr. Geddes Douglas is in full flower a little later than the other Nashville iris gardens for he makes a specialty of late-blooming varieties. Therefore, many of the visiting judges did not see some of his best and newest named varieties and seedlings, but he is carrying on very valuable work in extending the length of the bearded iris season.

There were many new varieties from all parts of the country blooming in this garden, but as these will be written up by others, I shall mention only a few that seemed especially good. The new yellow named JASMINE from Dr. Grant bloomed well, but late; I was delighted with the strong, sturdy substance, smooth finish, and resistance to the extreme heat of the Nashville season. PINK REFLECTION bloomed well, looking crisp and cool as a young girl in a freshly ironed frock. WHITE WEDGEWOOD was much admired, although it was a first-year plant and the flowering stalk was not up to proper height.

Among the introductions from Mr. Douglas, I was especially impressed by EXTRAVAGANZA, which I think is the finest amoena to date. The startling contrast of the white standards with the extreme velvet of the dark falls not only makes it an outstanding iris, but gives it garden value, and the color and substance holds even under hottest sun.

The first bloom on DIVIDEND, his late flowering deep yellow, was crumpled by the frost, but the later flowers were excellent, and it has the crisp, strong substance so needed in late-flowering varieties.

NANCY HARDISON (No. 43-15), named last year, was even more beautiful than it was as a seedling when it received an H.C. It is a late flowering blend of pale yellow and peach and gives a very pink effect in the garden; a lovely iris.

Three new seedlings that were named this year have great individuality and beauty. RED MAJESTY (No. 333A) is a very large and rounded flower of Eugenia red heavily flushed with Indian yellow in the throat and around the yellow beard. Four flowers open at one time, perfectly spaced on tall, four-way branching stalks made this one of the best examples of perfect branching that I saw this year. It is a rose-red iris and, of course, firm substance or I would not like it.

COPPER GLOW (No. 43-17) is a very brilliant deep golden brown with just a flush of rose throughout; good height, firm texture, and branching. The flower has the fire and color of autumn foliage.

AMANDINE (No. 43-11) is a very large flower of pale cream with very ruffled standards and falls. When you first see it, you say "What a beautiful bloom, but it looks so fragile;" but the surprising thing is that the flowers have very heavy substance and keep in perfect condition for three days under extremely hot sun.

Others in Mr. Douglas' seedlings that especially appealed to me were No. 303-2, a clear light powder blue; No. 42-P10, an ivory white with just a flush of pinkish mauve on the falls; No. 43-20, a fine late yellow.

Also there is a series of the new pinks, some smooth in finish and color with no venations; others, as Mrs. Pollock expressed it, "subdued by a more cloudy blending in the falls." Mr. Douglas seems to be on the right road to producing some fine pinks; all of this group of seedlings were tall and had good branching.

All in all, Nashville had very good iris bloom in spite of the fact that nearly half of the seedlings which should have bloomed this year did not although most of them seemed strong and husky. While I was there we had no wind or rain, but we did have very hot weather, and all of these iris that I have mentioned stood this test.

Each year as I see the new iris, I am more and more impressed with the splendid work in breeding better iris that the younger hybridizers are doing, not only in Nashville, but throughout the country, and this is a sure sign of the great and continued interest in this flower.

The American Iris Society will be 25 years old in 1945, and all the members should feel very proud of the Society and its accomplishments during the past quarter of a century.

CORRECTION

THE LIST of the Dykes Medal winners which appeared in the May BULLETIN carries the name "Olympia" as the recipient of the 1936 award for France. This should read OLYMPIO.

IRIS NOTES, SWEET AND SOUR

FREDERIC M. HANES

■ IS THE love of iris a natural trait of charming and generous people, or does a passion for iris make one charming and generous? This pleasantly complaisant reflection is the result of recent visits to the iris gradens of Mrs. Louise Blake, Mr. Junius Fishburn, Mr. David Hall, and Mr. Orville Fay. Whatever the answer may be, I have yet to meet an iris lover whom I did not want to meet again.

The story of Louise Blake's beautiful garden is an old one to many of our members, but it should be told again and again; for there one finds the ideal combination of lovely iris in riotous plenty and a hostess whose charm and generosity complete an utterly satisfying picture. All day long groups of people, young and old, wander freely along its winding paths, and not one escapes the kindly attention of the indefatigable hostess. But let us get to the iris!

One finds, of course, all the good old ones, and this year Mrs. Blake had covered a sloping area near the veranda of her home with a breath-taking display of the newest things, a Terrace of Debutantes! What a splendid idea and what an honor for any hybridizer to be represented in such a confusion of beauty! This display, together with her "Hall of Fame," which our Editor has described in a recent BULLETIN, makes this truly a National Garden. It should be duplicated in the National Capital.

No. TQ-70, now named SPINDRIFT, was blooming well, "delicate in color, robust in growth," says Mrs. Blake, in some written opinions I forced out of her, modest lady that she is. Later on, I saw the end of bloom of some of Mr. Hall's pinks, though DREAM GIRL had gone. What about these pinks? Frankly, I think they are, thus far, breeders' delights only. I know they represent a great step forward, and Mr. Hall says each generation is better than the last, but I must say they let me down a little. My expectations had been over-stimulated by some of our more romantic writers. FLORA ZENOR is not an iris—it's a shock! However, they do say that the Sassés have some new pinks that are something to wait for.

CHIVALRY is a grand blue, "a hyacinth blue with good form and

substance, a flaring, ruffled come-hither iris," says my poetic friend, Louise Blake, in a fine example of understatement. AZURE SKIES is just lovely, and TISHOMINGO completes a fine trio of blues, though the one with the difficult name is a bit "gawky" in form, but glorious in color.

There are so many new, fine whites that one might as well attempt to evaluate the yellows as to select the best of them. SHARKSKIN appealed to me for its fine, clear substance, almost like a gardenia or magnolia, and KATHARINE FAY is a compliment any man's wife should like. That grand iris, CAROLINE BURR, was easily the best white (why call it a cream?) in my own plantings. Which brings us to a consideration of Mr. Kenneth Smith's iris productions, to his article on iris hybridizing in the May BULLETIN, and to his latest Symposium.

Whew! Maybe I'd better save all this for a separate scribbling, but, briefly, his article on hybridizing is full of excellent advice for beginners, especially his advocacy of cold-frames. Norfleet Webb and I spoke of this method of growing seedlings in a former BULLETIN, and now, in our small way, we plant seeds only in cold-frames, thus getting better germination and stronger seedlings. It costs something in care and expense, but I believe it pays good dividends.

Junius Fishburn and I, in discussing iris ratings during his long visit to the Sarah Duke Garden this spring, concluded that numerical ratings were very unsatisfactory, since judges seemed to have decided that no iris should be rated higher than 91. We agreed that an A, B, C rating was more elastic and far less dogmatic; not an original conclusion, but it is pleasing to find that Mr. Smith, with his exceptional experience, has adopted this type of rating.

Finally, Mr. Smith, as a hybridizer, is somewhat in the same position as some authors of best-sellers. His early productions were so fine that his subsequent efforts suffer by comparison. CAROLINE BURR, YELLOW JEWEL, and VIOLET SYMPHONY set so high a standard that even he has failed to maintain the pace. I think LORD DONGAN's coloring unharmonious (a minority opinion), and ILSE LOUISE is not nearly so pretty as the name it bears. LOUISE BLAKE is beautiful because it can't be told from AMIGO. Neither can Mrs. Blake!

Mr. Fishburn does everything he undertakes with a lavish but discriminating hand, and his beautiful garden is an iris museum where one sees the newest and best in lovely surroundings. He and

his wife typify the generous hospitality which I love to think characterizes the true iris lover. We all look forward to his keen appraisals of the newer iris, though I sometimes feel that his kindly nature makes him too lenient in his judgments. So many new iris are introduced each year that stern criticism is needed, unbiased by personal considerations. The hybridizer who introduces an iris is like an author who publishes a book. He challenges the world's opinion, whether good or bad, and he has no right to feel hurt if his own appraisal of his progeny is too optimistic. Most parents suffer from the "sow's ear-silk purse" complex!

Mr. and Mrs. David Hall took me, a stranger, in so kindly a fashion as to make me wonder anew at the term "southern hospitality." Mr. Orville Fay came over for the evening and we had a grand talk about iris primarily—and chrysanthemums, too, for Mr. Fay is a grower and hybridizer of "mums" as well as of iris. He gave me a lot of information which should help us make the Sarah Duke Garden as interesting in the fall as it is in the spring.

The avalanche of fine yellow iris continues to grow in volume year by year. One no sooner decides that SPUN GOLD, FORT KNOX, YELLOW JEWEL, and GOLDEN SPIKE, for example, have reached the height of perfection than appear OLA KALA, JASMINE, and Fay's GOLD MEDAL! To paraphrase an old eighteenth century ballad:

I could be so happy with this one
Were t'other dear charmer away.

Let 'em come—we can't have too many, for yellow has the highest visibility of all the colors of the spectrum. An iris garden without yellows would be a dull affair. I saw only the last blooming of Mr. Orvill Fay's yellows, but he has some that are gloriously clear and pure. Even in a crowded class they should be introduced.

Some fourteen years ago Washington bid fair to become the iris capital, owing largely to the efforts of Mr. Marion Shull, Mr. Earl Sheets, and others. At Mrs. Blake's we met Shull again, after all these years, and it carried me back to the days when his MORNING SPLENDOR, SEQUOIAH, JULIA MARLOWE, and ELAINE were the aristocrats of the iris world.

In 1932 he published his *Rainbow Fragments*, one of the most thorough and painstaking studies ever made of pogo iris. He devoted 20 pages to a tabulated analysis of over 300 varieties of iris, and it is a vivid commentary on the progress of hybridizing that not

one of them is listed in modern catalogs! Mr. Shull deserves to be honored as one of the pioneers in the stimulation of the hybridizing enthusiasm which has produced the truly remarkable flowers which delight us today.

The rapidly growing class of yellows marked with white (or whites splotted with yellow) contain some of the daintiest of creations GOLDEN FLEECE, GILT EDGE, MARY E. NICHOLLS, and Essig's Madonna group are good examples of truly delightful iris. Robert Schreiner calls them "creams," a very misleading designation. Another and more descriptive name should be found for them.

FROSTED GLASS. A little dull, but really frosted.

ORANGE GLOW. Not tall enough, but glows with an inner fire.

ETOILE D'OR. Exquisite texture.

CLOUD CASTLE. "Pale heavenly blue," says Mrs. Blake, "that men pass by without seeing, but which makes women stop and rave." Well named.

ELMOHR. Here's one that fully lives up to advance billing. Magnificent! Buy at once if you haven't done so.

CHINA LADY. Very nice but hardly in the new A class.

INSPIRATION. A grand, rose-toned iris. It was one of the pleasant surprises of a batch of roots from Schreiner. Seven years old, but worth much more than it sells for.

JAVA SKY. A gorgeous blend, difficult to describe, unless you are a connoisseur of foods, like Mrs. Blake, who says, "It is the result of mixing crushed strawberry preserves, pineapple jam, and blueberry pie."

CARILLON. "The color of a ripe apricot" (Mrs. Blake speaking), "making an excellent, lovely clump. Form is not everything; lots of pretty girls keep their mouths open." (Ugly ones, too, Mrs. Blake!)

CONSTANCE MEYER. A truly beautiful "pinkish" iris. Now that we have "pinks," one must use the adjective instead of the noun.

THREE OAKS. I put it down for immediate acquisition, Even before I learned that it bore the name of Louise Blake's garden; then I ordered it by wire. I can't begin to describe it, but Mrs. Whiting succeeds very well; see her catalog.

In Mr. Smith's Symposium he made a place for problem children and mistakes under group E. I make bold to suggest a further addition—group F, for Freaks, though not necessarily *unattractive* freaks. The following are nominated; BERTHA GERSDORFF, MOONLIT SEA, CLOVELLY, SEA OTTER, FIRECRACKER, and FLORA ZENOR.

Finally, I come to a group of iris which, in my own poor opinion, represents the most interesting color development of recent years, not excepting the "pinks." I refer to the class of so-called "yellow blends," another poor designation, I think, for they range from

soft tans like SUNSET SERENADE to rich chestnut brown like TOBACCO ROAD and the rich CASA MORENA. The parade began, I suppose, with Dr. Kirkland's COPPER LUSTRE and BROWN THRASHER, but it has been carried forward by Dr. Kleinsorge, Mr. De Forest, and the Sasses. Of all that I have seen, I like CASA MORENA best, but I will admit that this is just one man's opinion.

I close these random notes with a tribute to JASPER AGATE, the loveliest of the copper brown-red bicolours, and to CAPTAIN WELLS, two iris whose rich coloring seems overlaid with a thin veneer of shellac, "highly finished" they are, in every sense of the term.

WHAT'S NEW IN SOUTHERN CALIFORNIA

LENA LOTHROP

■ OUR SPRING was cold and the iris season late, but at last came the word that we were waiting for—the oncocyclus at Whitehill were in bloom. Each year they open the iris season. We found them as lovely as always and made a second trip to do homage to their exquisite beauty. Between our two calls Dr. Cook, of Evans-ton, and Dr. Randolph, of Ithaca, had come to see them. Both men had been enthusiastic in their admiration. Dr. Cook said the colors of the oncocyclus were beyond this world, beyond anything he could have imagined. I hope it will be possible for him to come again and make a report of them.

It was not until April 7 that we went to the White garden to do our first rating of pogon iris. At the upper end of the border was a tall, deep yellow, No. 1-41-50, that attracted our attention. There stood a group of stalks 50 inches tall, making an impressive clump. Farther down the border we were stopped by another yellow, No. 1-42-10, which was a much better iris and commanded a high rating. It was an intense yellow, bright and clear with a splendid, dense, orange beard. It grew 38 inches tall and was perfectly branched. Later, when BERKELEY GOLD bloomed, I thought the two might be comparable in color, but there is a difference in their beards for the beard of BERKELEY GOLD matches exactly the petal which surrounds it.

BERKELEY GOLD was very short, but even so it was a remarkable iris because of its extreme purity and intensity of color. It was fully equipped with branches well spaced and with firmness and breadth of petal, so when it does grow tall, it will indeed be something worth looking at, something everyone will want to grow.

FULL MEASURE (De Forest) was another yellow new to me. This was a dark yellow with an interesting sheen. It had a beautiful stalk, but the flowers were flecked, probably due to the cold weather. We have observed that yellow iris that may fleck in cold weather will often come clear when it is warm. I am hoping this is true of FULL MEASURE for I liked it exceedingly.

LORI MAY (De Forest), a small plant, gave me one short stalk with very beautiful flowers. Mr. Walker, of Ventura, said THREE SISTERS (De Forest) was the outstanding new iris in his garden.

Plicatas seem to be fashionable these days, but aside from that many breeders think them good material with which to work. There were a host of them among the seedlings at Whitehill, most of them tall with large flowers and in all colors, but it was a short one that captured my affection. This was (ALWAYS x ORLOFF) and it looked like an oncobred in that the white background was almost completely covered by "spatter-work" done in a light rosy purple. This is growing in my garden, and I also have one of the big fellows that was most outstanding, so I will be able to report more fully on these next year.

Other outstanding iris from the White garden include a coppery seedling; a most striking blue which I will mention later; and ELENA CHOOSING, which is a tall, large, metallic gold iris (not a yellow) with shadows of lilac and with electric blue below the beard.

Both the Messrs. Taylor, who belong to our group of judges, are producing nice seedlings. Mr. Carl Taylor has a fine pinkish blend with round petals and tall well-branched stalks that he has named PRINCESS OF BRENTWOOD; and he has a good, tall, variegata named JOSEVIEVE. This is not so bright as CITY OF LINCOLN but has much better form. His MARGARET BOND is a charming yellow, and he also has a nice plicata with bronze-purple trimmings, the color of which is found in the beard. It is tall with broad petals. (Taylor No. 305.)

I was not able to get to the garden of Mr. Fred Taylor, but I

have his TAWNY PEARL, which is a lovely thing with pearl brown standards and darker falls. I also have a small yellow and pure white seedlings of his which appeared to bloom in drifts. The falls were bright yellow and the domed standards, purest white. They conjured up huddles of little sunbounet girls with yellow capes and snow white bonnets.

The most outstanding iris in my garden was TOBACCO ROAD. While it was in bloom, I also had in bloom FORTUNE (which, by the way, is slandered by the pictures of it in the catalogs); COPPER CASCADE, DAYBREAK, and GRAND CANYON. Except for GRAND CANYON there is a resemblance between these iris of Dr. Kleinsorge's such as one will see in the paintings by one artist in an exhibition. Very little attempt is made to describe colors in painting, and it is getting almost as difficult to describe colors in an iris. I have said that TOBACCO ROAD was burnished copper, but it is more colorful and lovely than that; and I have said that FORTUNE was old gold, and that is not complete. What impresses me most about FORTUNE is that it is a very individual color, and yet is such a perfect self. If it were only tall! COPPER CASCADE is a good iris and was a favorite in the garden. The small plant of DAYBREAK produced a small stalk but had lovely flowers. More about this one next year. Dr. Kleinsorge is both a wizard and an artist.

Kenneth Smith's loan of some of his iris to Mr. Carl Taylor was a boom to all of us. His PINK RUFFLES is a lovely, small, pinkish iris most appropriately named. VIOLET SYMPHONY was impressive, but not particularly attractive in finish or color. LOUISE BLAKE—what we could see of it—was rich, velvety, and lovely, but most of it was in the ground. LORD DONGAN was not what the pictures had led us to expect, and I am not prepared to say much about it. It has a lovely color. I may conclude that I like it very much. LAKE GEORGE is simply superb. To produce such an iris should satisfy any man for a lifetime. I couple it with TOBACCO ROAD and say these are the finest pogon iris seen this year.

Of very outstanding quality are these three new blues: LAKE GEORGE, CHICORY BLUE, and Mr. White's blue seedlings that I have already mentioned. No one of them resembled either of the others, and I could not but wonder if perchance we were not standing at the entrance of a new series of blues which will take the place of those that have been with us for so long. LAKE GEORGE was tall,

flaring, rich in color; CHICORY BLUE looked to be true chicory blue with perfect stalks, cone-shaped standards and shining surfaces; the Whitehill blue was very large and tall with thick petals that looked to be carved from frost.

It may be that white iris are also due for a re-issue for WHITE SPIRE (Milliken) is as fine a white as I have seen and stands, literally, above them all with its huge flowers. Whether the weather had anything to do with it I do not know, but this season I saw several lavender-white—not blue-white—iris. Among them was a seedling, No. 44-12, in Mr. Nies' garden. It was not excessively tall, but it had form, substance, and finish that the veriest novice would recognize as outstanding. It definitely belongs to the new issue.

There is a white iris that has been waiting around to be recognized. It is hardy, grows well everywhere, and does well always. It has superb quality and, given a little push in the form of fertilizer, will nearly, if not quite, equal WHITE SPIRE in height. This iris is MOUNT CLOUD.

DIXIE SUNSHINE, which is one of Mr. Milliken's new iris, impressed me very favorably although I will have to confess that I do not know what the falls are like. It was a dark day and we Californians like sunshine. When I saw a huge bed of it, my spirits rose; for an instant I thought the sun had broken through—our good California sun! The iris is well named except that it should have been "California Sunshine." The large, globular standards have picoted edges and are of the clearest, brightest sunshine color.

Twice I visited the seedling garden of Mr. Milliken and was amazed at the number of fine seedlings there. It would be a good place to take our seedlings for comparison.

Our trip to the gardens of Mrs. Heimer and Mrs. Stuetzel in the Van Nuys valley was almost an aggravation because, due to the distance from home, we had to hurry so. Their gardens are among the most important in Southern California. I think they have the finest collections of "eastern" iris to be found here. It was there that we saw three of the new iris with tangerine beards (MELITZA was seen elsewhere as well), and it was there also that we saw the beautiful stalk of CHICORY BLUE and the wonderful clump of NARADA.



Helen Grier

A view of Milliken's charming iris garden in Arcadia, Calif.

I have reserved the loveliest new iris for the last. It flowered in the garden of Dr. Williams in Patton and was from his cross of *I. laevigata alba purpurea* by *Kermesina*, a variant of *I. versicolor*. In this case the *Kermesina* used was purplish in color. The seedling had a slender branched stalk 29 inches tall which held the flowers above the foliage. The standards, which (surprisingly) were erect, and the styles, were a pure, clear, shining, light lavender without marking or veining of any kind. The arching falls were deep lavender and were also smooth and shining and free from any marking, which is unusual in seedlings of *I. versicolor*. The falls carried a lovely yellow signal patch, and all petals were of good width. It was an exquisite flower.

I am very much interested in the method of hastening the germination of iris seed which Mr. White found W. B. Cluff practicing in Berkeley. He removes the cap over the radicle of the germ and the seed is then incubated in damp peat moss between cheesecloth at

a temperature of about 40 degrees F. When the radicle elongates, in three to ten days, the seed is planted as usual and plants appear without a long rest. On Mr. White's return from Berkeley, toward the close of the iris season, he plumped eight oncocyclis iris seeds by soaking and decapped them. These seed had failed to germinate during the winter and were about a year old. At the time of this writing six healthy plants are growing from the eight decapped seed with foliage from two to six inches tall.

ROANOKE RE-VISITED

JOHN DOLMAN, JR.

■ FROM 1941 to 1944 war conditions had made my usual iris wanderings impossible, with the result that the Spring of 1944 found me three years behind, and very painfully conscious of it. To be sure, the BULLETINS—not to mention the growers' catalogs—had kept me informed of the progress being made; but no real iris lover is content with that. He wants to see the evidence himself. This year I had better luck, and was able to renew my acquaintance with the very up-to-date collection in the beautiful garden of Mr. J. P. Fishburn, of Roanoke, Va. Naturally, no one garden can tell the whole story, but no garden comes nearer to doing so than this one.

Iris developments in Roanoke have been ably and systematically reported each year by Mrs. Steedman, and I have no wish to anticipate her comments for 1944, nor to compete with them. But my reactions to some of the broader trends may perhaps be of some interest to BULLETIN readers, if for no other reason than that they are based on a three-year interval and a corresponding sense of contrast.

Considered as a whole, the Fishburn garden was gorgeous, with good healthy growth, good average height, and the best range and balance in color contrast that I have ever seen in an iris garden. The bloom was at peak, or very little past it, when I arrived, with only the early varieties gone by, the mid-season ones still in good shape, and the late ones just opening their first or second flowers. I had two full days in the garden, and a good opportunity to watch

performance in various kinds of weather. At first it was cloudy and fairly cool. Then there were intermittent periods of sunshine, cool and warm breezes, a lively shower, more sunshine with high humidity, a clear sunset, a bright, humid morning, and finally a blazing hot sun of the sort that wilts all but the toughest flowers.

I was also lucky enough to meet old friends and make some new ones among the garden visitors, who included Mr. Shull and Mr. Watkins from Washington, Mrs. Blake from Spartanburg, Mrs. Steedman and Mrs. Davis of Roanoke, and many others. Unfortunately, I missed renewing acquaintance with Mr. McKee and Mr. Smith, who had left a few days before. I enjoyed the privilege of exchanging opinions at some length with Mrs. Steedman, Mrs. Blake, and Mr. and Mrs. Fishburn, but the comments which follow are strictly my own and are not to be blamed in any way on these delightful people.

My most urgent curiosity, of course, was to see the tangerine-bearded "preludes to pink." I had seen FLORA ZENOR and No. TQ-70 on small one-year stalks at Nashville in 1941, and had also seen the first tiny flower on LEILANI; and I have grown MELITZA since 1941. Mr. Fishburn did not have LEILANI, and I have not seen it since it grew up, but as I remember that first flower it was a deeper pink than any "Seashell" or "Flamingo" pink in Mr. Fishburn's collection, though a bit on the yellowish or peachy side. Mr. Fishburn had nice clumps of FLORA ZENOR, No. TQ 70 (now called SPINDRIFT), OVERTURE, and the Loomis seedling marked No. V20; he also had one-year stalks of several others, including PREMIER and LADY LOVE, all paler and less pink than the first four mentioned. Of the four, SPINDRIFT is the deepest in color but seems to be marred by considerable veining; it was a bit past its prime, which may have accentuated this quality. The seedling No. V20 has the most stunning beard of the lot, very large and brilliant, but orange rather than red; the falls have about as much pink in them as those of OVERTURE, the standards perhaps a trifle more, but OVERTURE has much more red in the beard. FLORA ZENOR comes nearer to suggesting pink than any of the others, the distinct reddish tone of the beard carrying well into the undertone of the falls; it is a little tall and spindly for the size of the flower, but in a clump of ten or more stalks it gives a very distinctive and pleasing effect, especially when shaded from the direct rays of the sun. Of the quartet, OVERTURE seems the best balanced and most refined iris, but FLORA ZENOR, the

most convincing step toward pink. On the whole, my impression is that the progress toward pink in this line of breeding has been slightly exaggerated, and the quality of the varieties themselves somewhat underrated. In other words, they are not quite as pink as I hoped to find them—though all are considerably pinker than MELITZA—but they are better garden iris than I expected to see.

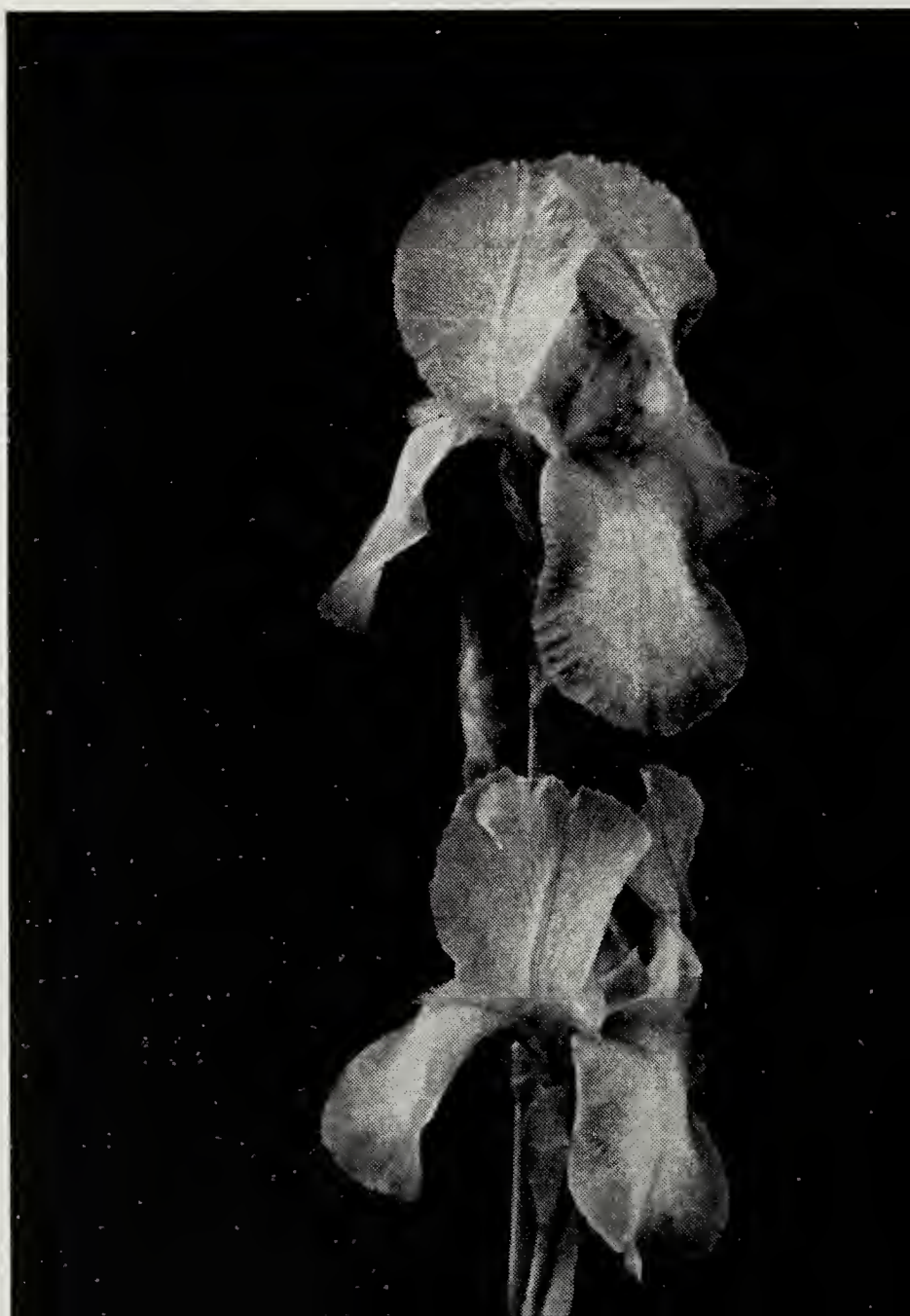
My worst disappointment was in the new whites, of which many have been introduced and highly praised in the last three years. Most of them are cold whites, or blue whites, and one or two I would call dirty whites. Four or five are extremely large-flowered, but at the expense of form, substance or proportion. The best in form seem to have poor substance, and the best in substance to have poor form. Some have long, shapeless falls, out of proportion to the standards; others are blameless, but dull; others are flimsy. I was hoping to see a hardy ruffled white, with the purity of PRISCILLA, the sprightliness of SNOW FLURRY, the refinement of PURISSIMA, the poise, branching, and nobility of EASTER MORN, the size and richness of GUDRUN, and the floriferousness of CRYSTAL BEAUTY. I did not see it. I saw FRANCONIA, WINTER CARNIVAL, ALBA SUPERBA, NORTHMAN, SNOW VELVET, WHITE WEDGEWOOD, JAKE, KATHARINE FAY, and numerous others. Of those mentioned, WHITE WEDGEWOOD seemed the most distinctive and pleasing iris, but it is not pure white; it is more nearly in a class with CLOUD CASTLE, AND THOU, HELEN MCGREGOR, and AZURE SKIES, which are advertised as blues. It differs from most of them in having a slate blue beard that blends with the whole flower in a curiously charming way.

There are now many of the very pale blues competing with GLORIOLE. Some of them are doubtless easier to establish and more reliable performers, but I did not see anything unmistakably superior to GLORIOLE at its best. Since the blue whites are usually blue when they open, and the pale blues usually fade more or less toward white, the distinction between these classes is rather vague, and the catalog descriptions are often highly misleading. AZURE SKIES is a handsome iris, but it is certainly not azure, nor anything like it. CLOUD CASTLE and HELEN MCGREGOR have been described as wistaria blue, but the only wistaria I have ever seen of a similar color is one that was sold to me as a white wistaria. On the whole, there now appear to be more than enough of these very pale blues



Extravaganza, a richly colored near amoena of excellent form and substance.

Blue Shimmer, a stunning and totally different blue plicata, recipient of an A. M. award.



Photos by F. W. Cassebeer

*Chivalry, a regal
blue iris which has
been widely ac-
claimed. Originat-
ed by our presi-
dent.*



*Golden Spangle, a
reliable and florif-
erous bright yel-
low with a white
patch on the falls.*

and very blue whites that are satisfactory in quality but not very distinctive, though Mr. Hall has another, not yet introduced (No. 41-35), that looks as good as any. Among the cold whites that are white rather than blue, Mr. Fishburn has a seedling (No. 404-1) that seems to me better than most; it is tall, well-branched, with a graceful, flaring flower of good substance and exceptional fragrance—not a clear white, but a much more refined iris than ALBA SUPERBA or WINTER CARNIVAL, and less fragile than FRANCONIA. There are also plenty of warm whites, but most of them are really creamy blends, or yellow and white bicolors. I looked hard, but I could not find any real white equal to EASTER MORN as I have seen it on one or two occasions when it chose to do its best, and no white for which I would trade GUDRUN if I could not replace it.

Among the light blues, as distinct from the pale blues or vague blues, there has been some real progress. For years my standard has been CASTALIA, the bluest blue-lavender in my garden, and a good, reliable, all-around iris. Most of the light blues, introduced and publicized as great advances in breeding, have either been inferior to it in hardiness, strength of stem, or reliability, or they have been decidedly less blue. But now, for the first time, I am compelled to recognize some rivals, the most promising of which are FROSTY BLUE and BANDMASTER. FROSTY BLUE may not be quite as blue as CASTALIA, but it is fairly close and a nice flower; it has a graceful, flaring form, good height and branching, and looks vigorous, and it has a bluish cast in any light, even against the sun. BANDMASTER is, I believe, almost the same color as CASTALIA; it is taller, larger, and better formed. If it turns out to be as reliable, year in and year out, Mr. Hall will deserve our hearty thanks. However, progress in this section is still confined to quality; no iris yet is any nearer to true blue than CASTALIA, and even this is only a bluish lavender, not a blue.

As one might expect, the most bewildering advance in the last three years has been among the blends—especially the descendents of PRAIRIE SUNSET, MAY DAY, and MATULA. My first impression was one of keen pleasure in the multitudinous additions to the color range and the improved intensity of color among the larger flowers. But after the hot sunshine descended upon us, my pleasure was tempered by disappointment for a painfully high proportion of the newer blends seem to lack substance and to wilt or fade far too

quickly. A good many of them also lack form. If SUNSET SERENADE is the best among thousands of PRAIRIE SUNSET seedlings, progress in that particular direction has not been revolutionary. The child is not much more colorful than the parent; it is bigger, but seems to exaggerate the faults, rather than the virtues, of PRAIRIE SUNSET, being slightly more formless, and fading a little more quickly in the sun. The best new blends seem to be the ones which show a blaze of blue or lavender at the center of the falls, suggesting a derivation from EVOLUTION or MOONGLO, though some of them also have PRAIRIE SUNSET blood in them; many of these have better substance than the smoother blends, and a few have better height and form. THREE OAKS, Sass No. 40-400, and DeForest No. 37-40 are good examples. The most beautiful and original arrangement of colors I saw in a PRAIRIE SUNSET seedling (Sass No. 40-311) included this dash of lavender against a fascinating conglomeration of yellow, orange and copper; unfortunately, the stalks were less than 20 inches high.

Among the self-colored blends there are many striking new tones, especially in the range between orange-russet and henna. GAY TROUBADOUR, THE SENTINEL, PRETTY PENNY, CHIEF POKING FIRE, CASA MORENA, NIGHTINGALE, TOBACCO ROAD, COPPER ROSE, ARAB CHIEF, and Lapham No. J 13 TS are all strikingly original, and some of them unbelievably smooth, but very few of them will stand more than three hours of very hot sunshine.

The newer reds show many improvements in quality, but for the most part the selfs are no redder than they were three years ago; they still tend toward crimson or wine purple on the one hand, or toward coppery brick red on the other. REDWARD, ACTION FRONT, FLAMELY, DISPLAY, REDYEN, and RESOLUTE are doubtless better iris than RED GLEAM, RED VALOR, RED BONNET, and GARDEN MAGIC, but they are not appreciably closer to real red. The one real break toward red is a Sass seedling (No. 36-41), said to be a cross of PRAIRIE SUNSET and GARDEN FLAME, the falls of which are more nearly red than anything I have seen before in a bearded iris. Unfortunately, it is not a self, but a red and yellow bicolor. If the pollen carries its color into succeeding generations the way that of KING TUT used to do, it should bring the true red self a little nearer and make Dr. Everett's trigger finger very itchy.

There were many other varieties and groups that interested me,

but I shall submit my comments upon them to the Editor in the form of brief notes. Meanwhile I shall go out on a limb and summarize my present reactions in four generalizations. On the basis of a three-year contrast I should say:

First, that we have made only slight progress toward wholly new colors: we are no nearer to a true blue; little, if any, nearer to a true pink; just a little nearer to a true red.

Second, that our most noteworthy progress is in the more varied arrangement of existing colors, including smoother blending in the self class, and more novel patterns in the variegated class—that is, in the placing of contrasting colors on beards, style arms, hafts, epaulettes, blazes, edgings, featherings, and veinings.

Third, that there has been considerable progress in the improvement of poise, form, branching, and strength of stem, but chiefly in the established color ranges, and especially among the blues and yellows.

Fourth, that the average improvement in substance—the kind of substance which resists rain and hot sunshine—is rather less than zero. It is being so widely sacrificed in the quest for color novelty and size, that the new varieties more often fade, or wilt, or melt, or burn out than did their predecessors three years ago. There are notable exceptions, but this seems to be the general trend. Possibly the results in color are worth the price, but a price is certainly being paid.

ACTION FRONT. Tallest of the Cook reds; a little stiff in form, and slightly veined.

ALBA SUPERBA. A huge white, marred by poorly shaped, extra long falls and a suggestion of coarseness.

AMARANTH. A darker, dustier, smoother WACONDA.

AND THOU. A little like WHITE WEDGEWOOD, but not quite so striking.

ARAB CHIEF. One of the brightest and most attractive blends in the orange-russet class, but flimsy in substance.

ATROUS. A very rich dark red in color, but not well formed, and inclined to burn in the sun.

BANDMASTER. A taller, larger, slightly more flaring CASTALIA.

BECK'S PINK. A very pale pink blend that stands heat better than most.

BERKELEY GOLD. A fine, tall, deep yellow, of good size and form; it seems to resist the hottest sunshine.

BLACK AND GOLD. Rather small and stiff on a one-year plant; the size and shape of KING TUT in the colors of EL TOVAR. Doubtless it will grow up.

BLACK BANNER. A really refined dark purple. Not as blue as BLACK VALOR, but a bit taller, and very smooth.

BLUE SHIMMER. Distinctive, and rather nice in mass effect, though the badly pinched falls are too noticeable on so large a flower.

BLUE ZENITH. One of the best medium blues; tall, graceful, well branched, and good in almost any light.

CALIFORNIA PEACH. Tall and distinguished on a new plant, this seems to deteriorate when slightly crowded in a three-year clump, losing height and poise.

CAPTAIN WELLS. Very smooth, but dusty unless back-lighted; to my eye it is too stiffly horizontal, after the manner of MELDORIC. Some will prefer it to RESOLUTE; not I.

CASA MORENA. A huge blended self of intense henna brown, perhaps the most striking new color in the garden; the form is droopy, and the heat resistance poor.

CHIEF POKING FIRE. A well named, glowing blend of fine form, but not much sun-resistance.

CHIVALRY. Seen on a short stalk, this was a large, clear, medium blue, of fine form and substance and great refinement.

CLOUD CASTLE. Nearer blue white than blue; large, graceful, and well named.

COMRADE. A rather pleasing, pale variegata blend, but a bit dull unless back-lighted.

COPPER ROSE. A lovely iris, all copper, and not in the least suggestive of rose. Rich and glowing.

DAYBREAK. A nice iris, not very tall, paler and yellower than the published color plate.

DISPLAY. A very rich wine red, of medium size and good form. Not as dark as RESOLUTE, nor as large, but brighter.

DREAMCASTLE. Short on one-year stalk, but a most distinctive iris of globular form, very wide petals, and a fresh orchid-rose color.

ELMOHR. The best color in this line of hybrids; I am one of the few heretics who can live without them, at least until they come down to seed-house prices.

FIRECRACKER. A larger, brighter, redder ORLOFF, with a striking red stripe down the center of the creamy white fall.

FLAMELY. A coppery brick red, but the best formed and most distinct of the Cook reds.

FLORA ZENOR. Very striking at Roanoke; spindly on a single stalk but good in the clump, and the pinkest of the red-bearded ones.

FRANCONIA. Graceful, but apparently a bit frail in substance.

FULL MEASURE. A good deep yellow, somewhat overshadowed by OLA KALA and BERKELEY GOLD.

GAYOSO. A bright, rather brassy yellow, with a good deal of veining. Well formed, but not large, and not as brilliant as OLA KALA.

GAY TROUBADOUR. One of the brightest and most original self blends in the near-henna class, which seems to keep itself weak by over-blooming.

GRACE BALLARD. A very nice pink and yellow blend of graceful form and good substance; less a self than a bicolor.

GRAND CANYON. Not large nor tall, and dull in mass, but the individual flower stands close inspection.

ILSE LOUISE. A nice blue plicata, not particularly unusual, but of good quality.

INSPIRATION. An underrated iris that performs well and grows on one; deep old rose, slightly veined, but rich and effective.

JAKE. Called a white, but bluer than CLOUD CASTLE, which is called a blue.

KATHARINE FAY. A large, clear white, with white beard. Though short on a one-year plant it looked better than ALBA SUPERBA or NORTHMAN, which were planted nearby.

LADY LOVE. Seen on a very short one-year stalk, this was paler than MELITZA and very slightly pinker, with a rather inconspicuous tangerine beard.

LADY OF SHALOTT. Small on a one-year plant, and not very different from some of the other blended plicatas.

LEMONADE. A cool, medium-sized yellow, much like the old VIRGIN GOLD in effect.

LORI MAY. A charming little pink and buff blend with a distinctive pattern; a bit dull in some lights, and very low growing, but has personality.

MAGIC CARPET. A very unusual blended plicata, with heavy rose markings, ruffled form, and very little yellow in the ground color. Floriferous and looks vigorous.

MAIDEN BLUSH. An interesting apricot blend, but inclined to be a little floppy in form. Not a self, but colorful.

MANDALAY. A large, rather stiffly horizontal blend, rich in color on first opening.

MARY VERNON. A bright little variegata, but it must have been much more impressive last year to rate an H.M.

MELANIE. A cool, orchid pink bicolor blend, with slightly narrow falls; a closer approach to pink than usual among orchid pinks.

MISTY ROSE. Very well named, and exceptionally well branched.

MONONA. A slightly less refined COPPER PIECE, larger, more vigorous, and more floriferous.

MOONLIGHT MADONNA. A bigger, tougher ELSA SASS, a little less delicately charming.

MOONLIT SEA. A bit messy, but certainly different. I liked it better after several inspections, and think I would like it still better planted with selfs. Planted next to BLUE SHIMMER, it emphasized the faults of both.

MULBERRY ROSE. Slightly coarse on close inspection, but rich and striking as a color mass.

NIGHTINGALE. Not large, but a smooth, rich even tone of orange tan.

OLA KALA. A stunning orange yellow, the most vivid in the garden. Slightly metallic in tone, but I like it. Good form and substance, and seems to grow well.

OREGON TRAIL. Very small on a one-year plant, but nicely colored and well formed, with substance to withstand heat.

OVERTURE. The smoothest and most finished of the tangerine-bearded pinks.

PRETTY PENNY. A coppery red, well named for form as well as for color, the falls being nearly circular. Wilted in the hot sunshine four hours after opening.

RAEJEAN. A nice two-toned yellow that stands up well in the hot sun.

REDWARD. A slightly improved RED GLEAM.

REDYEN. Slightly lighter than DISPLAY, with more veining and less substance, at least in the standards.

REMEMBRANCE. Rather a pale blended pink, not very striking at first glance, but it has the sort of refinement that grows on one. Flowers a little large for the height of the stems, but beautiful in form, poise, and proportion.

RESOLUTE. A fine, deep mahogany red self, smooth and finished; much redder and better formed than THE RED DOUGLAS. If it grows well, it should be the best dark red so far.

SALAR. Beautiful in 1941, this was weak-stemmed and sprawling this year.

SNOW VELVET. Velvety, but not snowy. Not a cream, but has too much yellow for its name, as has ARCTIC. ARCTIC is more impressive, and BRIDAL VEIL more refined, in the same color class.

SORREL TOP. An interesting brown-rose plicata, almost a reverse bicolor, marred by badly pinched falls.

SPUN GOLD. This seems different in different years. Not so large this year, it was much better and more refined; the falls were better ruffled, and not so overgrown.

SUNDAY BEST. A large, refined creamy white with yellow hafts; paler than GOLDEN TREASURE, taller and more graceful in form than MARY E. NICHOLLS.

SUNSET BEAM. Small on a one-year plant, but one of the richest, ^{finest} brightest blends, a yellower, lighter SUMMER TAN.

SUNSET SERENADE. A larger PRAIRIE SUNSET, but otherwise not superior; seems to fade even more.

SWEDEN. A tiny intermediate, not introduced, but very bright and lively; a lavender and cream bicolor, with bright orange beard.

SYMBOL. As I saw it, this was a small, low-growing, globular yellow, with olive brown haft markings; it must have been much more impressive elsewhere to gain its high rating.

TEA ROSE. (Whiting No. 4127). Smaller and lighter than THREE OAKS, but clean and attractive, in the pink blend class.

THE GUARDSMAN. A tall, vigorous bicolor in plum purple tones, dull, and uninteresting to my color sense, though lots of people like it.

THREE OAKS. One of the better blends, in substance as well as color. Large and well formed.

THREE SISTERS. A variegata slightly reminiscent of DECENNIAL; odd and interesting coloring, but poor shape.

TISHOMINGO. A large pale lavender of strong substance and very flaring form; a distinguished iris, but decidedly not blue.

TOBACCO ROAD. One iris that looks like its catalog color plate. A large flower, short on a one-year stem.

TONGA. A deeper, browner SALAR, small on a one-year plant; if it grows up, it should be very fine.

WINTER CARNIVAL. A huge flaring white, of fairly good proportions but no particular refinement or charm.

Cook No. 65-39. Paler and pinker than MAJENICA, and brighter in the clump. I like it better.

De Forest No. 37-40. A fine large blend in pink, lavender and yellow. Suggests CHINA MAID, but is deeper in color and far better in substance.

Essig No. 1196 F. If you like the creamy yellows and very warm whites I can recommend this. Planted with CALIFORNIA MADONNA and MISSION MADONNA, it looked better than either.

Lapham No. J 13 TS. A striking novelty in the color of tomato bisque soup, but lacking in form and substance.

McKee No. 4232. A bright canary yellow, intermediate in size and height, but of nice ruffled form, heavy substance, and intensely smooth, rich color; stood rain and sunshine exceptionally well.

McKee No. 4360. A huge, well formed yellow, with slightly paler centers to the falls; did not stand the sun as well as No. 4232.

Nicholls No. 23528. Said to be a sister of MARY E. NICHOLLS, and much like it, but taller and better formed.

Nicholls No. 24587. A smooth purple self, paler than SABLE, and less velvety, but apparently more vigorous.

Sass No. 36-41. A red and yellow variegata, with falls almost true red. Without exception, the closest approach to red I have seen in an iris.

Sass No. 40-371. Similar to ELSA SASS and MOONLIGHT MADONNA, but taller and apparently better than either.

Wills No. 25A-1-39. A smooth, floriferous old gold blend, somewhat like CORONET, but more gold, less tan. Apparently a good grower, and a fine, glowing iris for a semi-shaded place.

IDLE THOUGHTS OF AN IDLE FELLOW

(With apologies to Jerome)

J. MARION SHULL

■ PERHAPS as a charter member of the Society and as a sort of ex-iris hybridist—ex by reason of circumstances rather than lack of continuing interest—I might undertake a response to the criticism, complaint, or what-have-you, of Mr. Bedell in BULLETIN No. 92. Though I may address myself to him in person, I would include all those other newcomers to the American Iris Society, say all those who have become members during the last five years or so.

The BULLETIN, like any other publication devoted to a special interest, is faced with this sort of problem before it is many years old. Newcomers bring old questions. Imbedded somewhere within its back pages are most of the answers to the inquiries Mr. Bedell and his fellow novices would like to have answered. To repeat them becomes possibly boresome to old members; not to repeat them leaves the newcomer pretty much in the dark, so a middle ground must be taken by the authorities in charge at the risk of not pleasing anybody since they cannot possibly please everybody. In what follows I can only hope that the oldsters like myself will be lenient and not too bored with things repeated, and the youngsters to the Society, not too impatient if less than the whole story is told.

Fortunately for my task, I am not much of a back-slapper, am not devoted to any clique, and am not even much given to gossip. But human nature is still human nature and one must not ask the impossible.

This summer I was asked point blank by a good southern member if politics didn't have a good deal to do with the making of awards, particularly with the Dykes award. As in most arguments, that hinged on the definition of the word "politics," and it isn't an easy word to define with accuracy. Where can we draw the line between the perhaps even unconscious word or act of influence and the deliberate attempt to warp the judgment of another? I found myself making to my inquirer the dubious answer, "Yes and no." I believe there is little if any actual collusion among judges looking toward awards, but if two absolutely equal candidates are up for

consideration and one is presented by a very charming personality—say, by a delightful hostess—and the other produced by an old grouch who never has a smile or a pleasant word for anyone, is there any question where the award will go? Certainly and inevitably not.

But there are, of course, things done by the members and the judges, whether intentionally or not, that are in a way reprehensible, and quite a few of our members are guilty from time to time. He who writes of a new variety and publishes in the BULLETIN or in his catalog an estimate that it should be a Dykes winner, is taking an unfair advantage of the remaining judges. He becomes an advocate not a judge. The Editor would be justified in deleting every reference of this kind in matter submitted. In fact, he should consider it his duty to do so. Even talk of the “runner-up” may be equally objectionable and becomes in effect a “build-up” for that variety, which may in the meantime have become surpassed.

Where members gather among the iris in blooming time, there will also be chatter on the subject of the Dykes, and inquiries of each other about their choice for that award this year, etc. All this may be labeled politics and may very strongly influence some of the judgments recorded. After all, such a thing as absolute impartiality is not humanly attainable, so why worry?

I have known, and still know, many judges, and have not escaped entirely experiencing in my own person the conscious or unconscious activities of ambitious promoters. I have looked upon a good white that might have merited perhaps a rating somewhere in the upper 80's, with the producer standing by and vociferously proclaiming that if it wasn't worth a rating of 96 or more, he would eat his hat. I have stood by while a commercial grower, who had purchased a fine variegata blend the year before for \$100, hovered over its one rather poor stem with a single flower in bloom, almost in an attitude of adoration, extolling it to the skies. Under such circumstances it takes a hard hearted and still harder headed judge not to add a few points to the rating he had intended to give it.

So there is politics of a sort in the whole game of judging, but for the most part it is relatively harmless and apparently unavoidable anyhow. Mr. Bedell and his fellow novices will learn in good time not to take any awards too seriously, for there will always be many good iris, even top-notchers, that will never have a ghost of

a chance at any important award. With our linkage system of making awards, this, too, would appear to be quite unavoidable.

There is no such thing as an "ideal" standard of perfection, of branching or form of flower, or even of color, but there are recognizable excellences that one may note. To deal briefly with the question of branching which Mr. Bedell mentions, there are certain factors that are desirable. There is no merit *per se* in height or lack of height, but always there should be good placement of flowers on the stem, and good relationship of size to height. Good display demands that no two flowers should crowd each other while in bloom, a condition not always easy to obtain from certain ancestral lines. The iris is a flower of such perfection of form as well as of color that it should not sacrifice either one to the other. Pallida derivatives, with branches very short or wanting, should still have the flowers placed far enough apart on the stem that there may be no interference. If the form is beautiful, it is properly displayed; and if color is the main interest, the spread flowers show a greater expanse of the desired color.

Varieties with naturally longer branches should still be tested by the same rule. The flowers should be carried at intervals that will allow individual display of each bloom. The branches should tend away from the main stalk rather than toward it, and in the shorter-branched sorts should never toe in against the stem. True, the breeder has in earlier years kept and distributed many a variety that displayed all these implied faults because of some desirable quality of color or form or growth, but by now these desirable qualities have been so largely carried over into new varieties, without the ancestral faults, that it is hardly worth retaining anything not measurably good in this respect.

Form and color are so much a matter of individual taste that one touches on these with trepidation. No form whatsoever should ever be allowed to become our idea of perfection. There should be no attempt to standardize form—but there should be great consideration for proportion within the form. No form is good when the falls are too large or too small for the standards, or vice versa. And there are certain undesirable things that militate against good form or against good display of color. Falls may pinch back at the margins instead of lying relatively flat, and so offend in both respects. An "umbrella" curve to carriage of the falls is not apt to be as pleasing as the S curve or "line of beauty."

A horizontal carriage of falls may be entirely acceptable for a low-growing variety to be seen at one's feet, but not at all effective on a tall plant or one grown on a high bank. Standards well closed at the top are apt to be more pleasing than those which stand open and may appear floppy, but there is no accounting for tastes and even the floppy and disproportioned ones will continue to have their admirers.

Obviously, Mr. Bedell, like all other beginners in the iris field, is looking toward the time when he, too, will be the proud producer of new varieties and he wants to know what "blood lines to avoid." Unfortunately, there is no one qualified to answer that one. We can assume, of course, that the better the ancestry, the better will be the average of the offspring, but it needs always to be remembered that worthless things can derive from very excellent parents and that, conversely, very excellent things can be obtained from the mating of extremely unpromising material. However, there is a pretty definite mathematical relationship in both cases, and the chance of obtaining good from bad or bad from good is fairly remote. Anyone would be foolish to squander his time deliberately seeking to obtain worthy offspring from inferior parents.

The new breeder may well bear in mind, however, that the greater the difference between the two chosen parents, the greater is the variability apt to be among the offspring for he is working with extremely complex material. Two blues, when mated, *may* give a yellow, but the offspring are much more likely to be all blues of one sort or another, though perhaps no two alike. And so with all other colors. Parents that have much in common will naturally transmit much of that common heritage to their offspring, so if the breeder wants a yellow he will wisely mate yellows—but he will almost certainly get from this combination some that are not by any means yellow.

As to more Iris Family Trees, they may be interesting but are more apt to prove very little. My good friend Geddes Douglas has painstakingly gathered together the records, so far as they are known, of the so-called "Goldfish" pinks, "Flamingo" pinks, "Seashell" pinks, etc., in his "Prelude to Pink" in BULLETIN No. 92. There are so many unknowns in these records—so many "unknowables," in fact—that about all one can derive from them is that they have nothing demonstrably in common; that these "pinks" have

come about in various ways. Incidentally, I do not know quite what his records mean when he says "LENT A. WILLIAMSON *and other iris.*" Does he mean an undefined tandem series, or what? Every iris starts from a single pollen grain, plus a single ovule, and a pollen grain or an ovule cannot come from one *and* another.

But, after all, is it so utterly strange that these "pink" characters should have arrived by various routes? A good mathematician will tell you that on the basis of the standard 12 chromosomes of the bearded iris, to say nothing of the polyploid varieties now available, or of the more or less accidental happenings of mating that can occur, there are over 29,000,000 possible variations! Surely even with the flood of new hybridizers of recent years, we have not yet produced that many varieties, so there must still be room for the ambitious beginner. But I warn him, his most difficult moment will come when he begins to delve into the dictionaries, the encyclopedias of this, that and the other, in search for names for them all!

But these "pinks" that have us all so excited, and quite properly so in regard to their color, are still not any of them really good iris. All still leave so much to be desired that they should be looked upon as strictly a breeder's item rather than an ornament for general gardens.

Mr. Bedell acknowledges that he knows no other member. That is too bad. He should take steps at once to remedy this unhappy situation not only for the good comradeship that it entails but for his own preparation for the tasks ahead of him as a nascent breeder. I would recommend to him and to all newcomers to the American Iris Society that before they set foot on the treacherous and uncertain, though thoroughly enjoyable, path of iris breeding, they take a little journey in iris time to the garden of Mrs. Louise Blake at Spartanburg, S. C. Here in all probability is the finest iris garden in America today. Here are gathered together nearly all the newer things and some of the things not quite so new, all superbly grown and displayed by one who is an artist though she would not so describe herself. Hers is not a hybridizer's garden, nor does she grow plants for sale; therefore, she feels free of the restrictions that hamper many others. The grower of plants for commercial use must take first care to see that his plants may be sent out true to name. They must be in careful order lest the digging and labeling go

haywire. The grower of new seedlings has the same problem of keeping accurate records, plus the added psychological risk to his own judgment, for he must weigh the merits of his own entrancing offspring against those of the brats from across the streets, but Mrs. Blake is free from all these problems and may use her materials for the making of garden pictures according to her own sweet will.

In Mrs. Blake's garden the new member and prospective hybridizer will learn humility—not at all a bad quality in an iris breeder. He will sense the huge progress that has already been made in the iris world, or, failing that, will at least be aware of the tremendous competition to be met. He will learn that “good” is no longer the accepted password outside his own garden. And he may learn in due time, as most iris breeders already have, that what is superb in his own garden may in another garden, another state, prove no wonder worker at all. I swap my KHIVA for Miss Reese's SNOW FLURRY—and we are both disappointed. But I have the advantage of having seen SNOW FLURRY in its own home and of knowing that it was very wonderful there. Neither of us is very happy in having to make these mutual acknowledgments, but facts are stubborn things and have to be faced. I am sorry that SNOW FLURRY will not do for me or for my neighbors in the East as magnificently as it did in San José. And I am sorry KHIVA does not get up and dust in her garden as it did in mine, but that is just part of the game, and we all play it willy-nilly.

And our friend the novice who now looks forward with blissful anticipation to the first new seedling of his very own will also aspire to become an Accredited Judge, perhaps to rejuvenate, by the transfusion of fresh new blood, that somewhat senescent institution which he apparently suspects of back-slapping and falling into cliques. But before he receives the accolade let him ponder well just what kind of a judge he will make. Will his enthusiasm follow the pattern of the late Sam Burchfield of Michigan who saw such loveliness in them all that he could step a few feet into his garden, pluck a bloom and declare it to be “the finest iris in the world.” Two minutes and a few steps farther on and another “finest iris in the world,” and so on to the end of the garden journey, totally oblivious to the redundancy of superlatives. I'm sure Mr. Burchfield enjoyed life hugely.

Or will our new aspirant to judgeship calmly drift into the feel-

ing once expressed by our great first president of the Society, that "there are too many iris"?

It is not an easy task to be a good and just judge of anything, but here's welcoming Mr. Bedell and all his fellow beginners to one of the finest adventures that any garden-minded individual can set out upon.

MIDWEST IRIS SEASON

RALPH M. SCHROEDER

■ IT SEEMS as though there is no perfect season. Last year a very severe winter and cold spring rains made a scarcity of bloom. This year central Illinois was visited by heavy hot rains which advanced the season and brought it to an early close. In the Chicago area the season was very dry and very hot. On Sunday, June 4, even the stems of some varieties were wilted to the ground. The rest were taken care of the following day by a very severe wind storm. In spite of the weather we saw many lovely things.

In my own garden CAPTAIN WELLS showed more stamina than any other. As this iris grows in the spring, I often wonder if it will live until blooming season. The foliage appears weak and it is never tall enough for the bloom stem. In spite of this, its rich maroon color and heavy substance make it a great flower. REMEMBRANCE was the pinkest flower in my garden and showed more substance than any other pink blend, it probably attracted more attention from the visitors than any other. Another rugged individualist was ANGELUS. While no longer new, this iris is still entirely different than any other iris. Other of the newer iris which performed well were GRAND CANYON, OLD PARCHMENT, THE ADMIRAL, and FIRECRACKER. MAIDEN BLUSH did very well on a one-year old plant. Two old-timers that have never before failed me did so this year; they were ROSY WINGS and TREASURE ISLAND. ROSY WINGS was off color and TREASURE ISLAND had no branching.

I did manage to visit a few of the gardens between Chicago and Warrensburg. Two of these are off the beaten path for many iris fanciers. Mrs. Bach, at Bloomington, Ill., and Mrs. Medberry, at



F. W. Cassebeer

The lovely clear blue Siberian MOUNTAIN LAKE, perhaps the best iris contributed by our Registrar. Its form is excellent and the color effect of a clump, enchanting.

Armington, have lovely gardens well worth a visit. The majority of iris in these gardens are older varieties very well grown. Both ladies try for pleasing color combinations. They succeed. In Mrs. Bach's garden I found ILLINOIS SUNSHINE and WHITE PEACOCK. These are seedlings from the gardens of Miss Eva Faught, of Carbondale, Ill. ILLINOIS SUNSHINE is well named. It is a rich golden yellow self with a golden beard and deeper yellow markings at the haft. It compares favorably with any yellow on the market today. WHITE PEACOCK is a blue white with good garden value, but it is not clear enough in coloring to be a top-notch iris.

Mrs. Medberry had a seedling of her own which she calls "Marilyn Jean." It is pure white heavily stitched lavender pink at the edges of both standards and falls. The flower is similar in form to LOS ANGELES, one of its parents, but has better substance. It has a white beard with a pink tip and is very fragrant. There are eight buds on a 32-inch stem. In my opinion, it surpasses both SEDUCTION and TARANTELLA in this class. I have not seen ROSE TOP.

Moving northward I stopped at Glen Ellyn and visited the garden of Mr. Hodson. I saw several nice things unknown to me. These were either seedlings or new varieties with which I have not yet become acquainted. The most interesting was a blue similar in color to MISSOURI, but darker, smoother, and brighter. The season there had passed its prime, so I did not make many notes. I seriously object to determining the value of an iris from one view, especially when I know that the flowers are not at their best. I did note that there were two whites and a yellow to be looked for next year.

Next to Lombard and the garden of the Fischers. Mr. and Mrs. Fischer are both enthusiastic gardeners and there is bloom in this garden from earliest spring until winter. The first thing I saw in here was a single bloom of the above noted blue iris, which has been named OCEAN WAVES. This garden was also past its prime, but I did see here the best single plant of SPUN GOLD that I have ever seen. There were about five stalks of even height. It lacked the "velvety" appearance as there was no dirt on the falls. It appeals more to me as a clean flower than as a velvety one. "Boarding House Bedsheet," a native of the garden, was appropriately named except it was too generous in the amount of material used. EBEN had nice color but the flowers were small and bloomed from the side of the stalk like ears of corn.

I arrived in Wilmette in the heat of a June afternoon and stopped at the home of Frances Fay. Orville Fay has no home during iris season as he lives in the garden. There in the seedling patch were the best collection of yellow seedlings ever grown. There were about 12 or 15 ranging from light lemon yellow to the most intense yellow imaginable. These all had clear color, good substance, and good branching. Probably the most interesting was a seedling of SNOW FLURRY. It was not the best but is the first yellow pallida that I have heard of. There were too many good yellows here to try to describe them all, but I shall try to do so next year.

Here also I renewed acquaintance with KATHARINE FAY, No. 41-11, and No. 42-21. KATHARINE FAY is the finest white iris. The flower is clear white and all half markings are so deeply buried in the bloom that they are not visible unless you insist. It is nicely ruffled on 32-inch stems and gives close to three weeks of good bloom. This variety will be introduced by David Hall, who admits that the only possible purpose in using it for breeding would be to add three or four inches to the height. No. 41-11 is just as white, a trifle taller, and slightly lacking in the substance of KATHARINE FAY. However, the conical form and the swirl of the flaring falls make it very outstanding in the garden.

At the very top of my iris list is No. 41-21. This is a beautiful seedling of BALLET GIRL $\times$ GLORIOLE. It is a large, very ruffled blue with a blaze of white or pale pink at the center of the standards and falls. It is not a plicata as the color merely shades from deeper at the edge of the petals to lighter in the center, but this is not due to fading as the blaze is more pronounced on new flowers. With excellent branching, a world of substance, and 11 buds on a stem, what more can be asked?

The following morning I visited the garden of Mr. David Hall, D.P.I. The initials stand for Doctor of Pink Iris. The famous "back 80" was literally crowded with true pink iris of varying shades. Some of these new iris even had pink beards so any belief that the pink color is due to the reflection from a red or tangerine beard is wrong. Two of these pinks had beards of Chinese red and one was the deepest in color of any of the pinks. Again there were too many to more than note the ones I preferred and hope to see again next year.

For contrast in the field there were several dark reds and vari-

egatas. The best red was a black red self with an orange beard. Its form was slightly flaring. One variegata had lemon yellow standards and velvety mahogany falls. The coloring of the falls was solid with no lighter edge.

Two of Mr. Hall's most outstanding iris are FANTASY and CHANTILLY. FANTASY is a raspberry self with a tangerine beard. It sometimes has four falls on its very large flowers. CHANTILLY is an orchid pink with a yellow beard and yellow markings in the haft. The standards, falls and style arms are so tightly ruffled that they seem to be thickened at the edge. I tried to check the seedlings in which DREAM GIRL or OVERTURE had been used in breeding. My observation was that DREAM GIRL gave a fair number of true pinks even when used on pink blends. On the other hand, a large percentage of OVERTURE seedlings were in shades of peach and apricot.

The following notes on various varieties are merely one man's opinion and are a report on their general performance as I saw them in the gardens which I have visited over a term of years. When these notes are based on one year's observations, this fact will be noted.

ACTION FRONT. Another "red" iris.

ALBA SUPERBA. A large tailored white which does not excite me in the least.

ARCTIC. A fine cream white. Tall, colorful, and well branched.

AZURE SKIES. An excellent light blue iris. The slightly ruffled flowers have domed standards, flaring falls, and plenty of substance. It seems slow to establish itself. However, there is little doubt that it will soon be found in every collection of good iris.

BANDMASTER. A good medium blue. Very floriferous.

BARRIMOHR. Last year, a wonder; this year, a flop. One would have to see it to believe there could be such a difference.

BLUE GLOW. I have seen this only once, but it seems far from glowing.

BLUE SHIMMER. The color is good.

BROWN THRASHER. I have seen this in 17 gardens over a period of four seasons. There is nothing about it that I like.

BUTTERCUP LANE. A very fine ruffled bright yellow iris. Low growing and just the thing for the front of the border.

CALIFORNIA PEACH. The peaches in California are less colorful than those from Michigan.

CAROLINE BURR. One of the finest. A pale chartreuse with excellent form, substance, and branching.

CLARET VELVET. A low-growing claret red self with a maximum of substance, an asset to any garden.

CLARIBEL. I have yet to see the superior of this plicata.

COPPER ROSE. Too many like it.

CRIMSON TIDE. I neither like nor dislike this red.

DAYBREAK. One of the best of the pink blends. More color than most, with Kleinsorge branching and substance.

DEEP VELVET. A great iris.

DISPLAY. I like this better than most reds. It burned last year on a new plant but stood up under hotter sun this year.

DUBROVNIK. Still a good blend.

E. B. WILLIAMSON. This is excellent in my garden. I have seen it in other gardens where it was not so good.

EDWARD LAPHAM. Better form than most reds, but I do not care for the color or branching.

ELMOHR. Seems to be a sporadic bloomer. The color is better than any WILLIAM MOHR seedling with the exception of BARRIMOHR at its best.

FLAMELY. Entirely different than most reds. I like it.

FLORA CAMPBELL. A light red which lacks personality.

FLORA ZENOR. The more bloom the worse.

FORTUNE FORM. Branching and substance, but I don't like the color.

GARDEN MAGIC. A good red.

GLEN ELLEN. I like this light tan blend.

GLORIOLE. Still one of the finest pale blues.

GOLDEN FLEECE. A yellow that is different and very floriferous.

GREAT LAKES. A tall, well-branched blue with good substance. To me, the color is a trifle dull.

GYPSY BARON. This *plicata* is different but leaves me wondering whether or not it is good.

ICY BLUE. Not for me.

INDIANA NIGHT. An utter disappointment. Only once have I seen it with any good quality except color.

JAKE. A sloppy white. The first time I have seen it.

KANSAS SUNRISE. On a first-year plant it looked like a rainy day.

LATE SUN. Deep yellow. That's all.

LIGHTHOUSE. Don't pass this. A fine rosy red.

L. MERTON GAGE. I have seen it fine and I have seen it mediocre.

LOTHARIO. On a one-year plant I liked the color.

LOUISE BLAKE. If this is an improvement over AMIGO, Webster is wrong.

MANDALAY. I think this is a fine iris.

MARY E. NICHOLLS. An aristocrat but slow to get started.

MARY VERNON. Very well branched with small flowers. This *variegata* could be brighter but seems to have all the other good qualities. The same is true of MIOBELLE from the same breeder except that MIOBELLE is a dark blend. Both should be of value to breeders.

MELITZA. Not pink, not hardy, not good.

MOONLIGHT MADONNA. This is too good to be an improvement over ELSA SASS. A very fine lemon yellow self.

MOONLIT SEA. The waves are too rough for me.

MOUNT WASHINGTON. A beautiful plant in milder climates. Save your money in the North. It is very tender.

OLA KALA. A beautiful flower with collapsing branches.

PATH OF GOLD. A good yellow dwarf.

PERSIAN PRINCE. To me, variegatas are just so-so. If you like them, you should like this one. Very smooth.

PRAIRIE SUNSET. I have seen it fine, but its plant habit is erratic.

ROYAL SCOT. A plicata very heavily marked with purple red. If you care for this type of flower, it should be a welcome addition to your garden.

SHARKSKIN. To me, very uninteresting.

SNOW VELVET. Very fine. Like ARCTIC in color but of entirely different form.

SOLID MAHOGANY. The best dark red iris on the market. One of the very few that I like. A one-year-old plant.

SPARKLING BLUE. A clear medium blue which did not interest me on a year-old plant.

STORM KING. Excellent dark purple iris which sulks in the Midwest.

SUNDAY BEST. A cream colored iris with a minimum of form.

SUNSET SERENADE. Seems brighter than PRAIRIE SUNSET, but I don't believe I need it in my garden.

THE SENTINEL. Color, color, color. No form nor branching.

THREE SISTERS. Cream standards and red falls. A most unusual iris, a good one that does not appeal to me.

TITIAN PRINCESS. I understand that this is supposed to show traces of pink. As I saw it on a one-year plant, I doubt that it is worth a name.

IRIS IN ENGLAND, 1944

N. LESLIE CAVE

Surrey, England

■ THE WEATHER let us down badly this year. On the night of May 6 there was a brute of a frost, followed by three more, and those whose gardens, like my own, are on low-lying land suffered severely. Three-quarters of my iris had their flowers destroyed. When the season had started, a tropical heat wave rushed the plants into bloom and then a wind sprang up, which continued and increased in strength, so that blooms were torn and stems laid low. Added to these trials, we experienced one of the longest spring droughts I have ever known.

In spite of these handicaps, there were some very fine iris to be seen. I will try to keep myself in hand, but it is very difficult not

to use up all the superlatives in describing the seedlings of Mr. Cedric Morris. Mr. Morris, who is a well-known artist, has been quietly working on plicatas, and the results he has attained are astounding. He set out to produce large plicatas with tall stems and well-formed flowers of substance, and he has succeeded. How successful he has been was hard to tell as his latest seedlings suffered terribly in the frost, particularly his yellow plicatas; in fact, only a few of the latter flowered. Two of these, however, were splendid, one red-brown on yellow and the other true brown on yellow. They were streets ahead of ORLOFF, which I saw and liked at Mrs. Murrell's nursery, and were edged and not sanded, i.e., they were orthodox plicatas in yellow and brown. He has blue on cream, mauve on cream, yellow on white polka-dotted mauve, grey on cream, and now is getting a number of three-colored sorts which I feel sure will produce something surprising very soon.

Too, he has produced the one and only real pink iris in England. I should think from the descriptions that it is similar to Mr. David Hall's pinks. It is deep flesh-pink with a slight orange flush and a vermillion beard. The flower is well formed, not small, and the only doubt about it is its height, which was rather short. This may have been due to the freeze. A dying flower looked like a bit of crumpled lingerie. Mr. Morris considers that MARY GEDDES, way back in its lineage, is responsible for the color. It is luscious and an entirely new break over here.

Other selfs and blends have appeared from the plicata x plicata breeding, some of which are excellent. One large creamy yellow self had brown plicata markings only at the haft. I presume it must be classed as a plicata although the effect is a cream self.

Mr. Morris grows WILLIAM MOHR and MOHRSON and has obtained seed from both. He also had *I. lortetii* with three spikes of bloom!

At Mr. Randall's garden at Woking, where he grows iris splendidly, I had the pleasure of meeting Mr. Christie Miller, our president, Mr. Long, Mr. Angus Wilson, and Canon Meyer. As I have now met Mr. Long, I must curb my transports about his seedlings, but try as I may, I cannot help enthusing over a terra-cotta seedling. This is something quite new. The color is smoothest terra cotta slightly suffused orange-pink. The flower is sleek, well formed, and incredibly lustrous. The standards are practically the same color as the falls, venation is almost non-existent, and the beard is inconspicuous. A stunner.

I saw again his lovely pale blue, which although divided last year, was putting up a wonderful show. Almost every bit of rhizome had a tall stalk, several with four huge flowers out together. My doubts about its growth were obviously unfounded. The branching is fair. Every stalk was staked, but in fairness I must add that it was planted in a very windy corner. Among his blends I noted MARY SHORE, large and frilled with yellow suffused mauve standards and with pale mauve falls, a blue central flush, and an edging of the yellow of the standards. It is a beauty. His BLOOD CARNELIAN, the brilliant cinnamon-copper which I saw last year, was putting up a good show with two flower stalks to one rhizome. and WAR AND PEACE, an indescribable blend of red-brown, mauve and gold, very broad-petaled, was also looking well. Neither of the latter is tall.

Mr. Long has also some surprisingly good things among his latest seedlings. He brought up from Wales some buds which had just opened and I could therefore judge only on color and substance. His favorite is a French grey slightly suffused Havana with a yellow halo around the beard, the falls edged golden brown. My favorite was one of the freshest, coolest-looking flowers I have seen. The standards are pure white, the falls bright, clear yellow lined white.

Of American-raised iris, I saw at Mrs. Murrell's RADIANT, STAINED GLASS, WAVERLY, and BLACK WINGS. RADIANT is a brilliant piece of color, and BLACK WING is rich and dark, but I am afraid I did not think much of WAVERLY. MOHRSON in Mr. Morris' garden was stunning, very dark and imposing. I am impatient to see your latest iris; I realize these I saw are all regarded as old by you.

Mrs. Murrell's WHITE CITY was looking good in her nursery and still better at the iris show on June 6, where I saw a spike with four open blooms. Her TORCHLIGHT is the biggest and brightest variegata we have. I should like to compare it with CITY OF LINCOLN. Mr. Spender, whose work on *I. siberica* is becoming known, has produced a most beautiful bright blue, lighter than GATINEAU, which he has named ATLANTIS. It has Cambridge blue style arms and is a most entrancing flower.

Members will be interested to learn that AMIGO missed receiving the Award of Merit only by the skin of its teeth. The award went to Canon Meyer's SAINT CRISPIN, a broad-petaled bright yellow. I am sorry AMIGO missed it.

PROFESSOR MITCHELL HONORED
WITH FOSTER MEMORIAL AWARD

FRIENDS of Prof. Mitchell will be glad to know of the honor bestowed upon him by The Iris Society (England). The following letter announcing the award was recently sent to him :

At the Annual Meeting of the Iris Society held on Tuesday, June 6, it was unanimously resolved to present to you the FOSTER MEMORIAL PLAQUE in recognition of the very great services which you have rendered to iris growers throughout the world. We trust that you will accept the award with our warm greetings and as an indication of the friendly ties between the American Iris Society and our own.

Under existing circumstances it is impossible to have a plaque made, but we hope to make and send it to you when controls are removed.

It happened that the resolution was passed within two or three hours of the news of the Allied landing in Normandy, and it was felt by all of us that we should like you to realize that the award represents in a small way an expression of the goodwill which we in this country feel toward the United States of America.

Very sincerely,

C. W. CHRISTIE-MILLER, *President,*

THE IRIS SOCIETY.

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W. F. CHRISTMAN, Secretary

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BULLETIN
OF THE
AMERICAN IRIS SOCIETY

NOVEMBER, 1944

No. 95

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THE EDITOR'S BULLETIN BOARD

■ IN SELECTING THE ARTICLES for publication in this number it was our endeavor to present to our readers a variety of topics, including some that have not been discussed in the BULLETIN in recent years. It is in line with our avowed intention to try to print in each issue stories that would interest both the beginner and the advanced iris enthusiast.

For our opening article, we have a provocative discussion by a new contributor, Robert E. Allen, who raises many questions as to the present aims of iris experts. His suggestions for research subjects are worth noting. This is followed by an informative story on the dwarf iris by H. M. Hill, who rightfully feels that this section has been unduly neglected by the hybridizers.

Robert Schreiner contributes an interesting exposition on the hybrid iris of the Mohr group. He discusses the known seedlings of WILLIAM MOHR and tells how to grow them. One of the newest of these, LADY MOHR, is described in a companion article by Prof. S. B. Mitchell.

Kenneth Smith has more to say in praise of Mrs. Blake's delightful garden at Spartanburg which has become a mecca for iris lovers from all over the country. Once more Lucile Steedman gives us a fine resume of the many new varieties to be found in Mr. Fishburn's garden at Roanoke. Her keen observations and thoughtful comparisons of the newer iris always make interesting reading.

Dr. L. F. Randolph of Cornell University provides us with a scholarly article on the chromosome counts of tall bearded iris varieties which should be of particular interest to plant breeders. In 1945 we hope to have the privilege of publishing another article by the same author on the germination of iris seeds.

Lastly, we have a number of pages devoted to variety comments. Some of them have had to be shortened considerably and edited but, since we have tried in every case to retain their original meaning, we trust their contributors will not object to the changes that have been made in their copy.

F. W. CASSEBEER, *Editor*



F. W. Cassebeer

Down East is an imposing dark iris originated by Mrs. Tobie.

LET'S STOP PLAYING AND ACT GROWN UP

ROBERT E. ALLEN

■ WHEN I recently tabulated some of my iris breeding records, I came upon a case which started a train of thought that led to the eventual conclusion that we members of the A. I. S. have been as a whole somewhat juvenile and rather derelict in our duty of really studying the iris as it should be studied if we are to make lasting progress in its improvement. I presume, of course, that several of our senior breeders have forgotten more about some of the details of iris genetics than many of us will ever know. I know, too, that some of them have such a fund of knowledge resulting from their own experience that they could write most instructive books on the subject. Inasmuch as this knowledge constitutes an important portion of their "stock in trade" while they are active as commercial breeders, I can sympathize with their reticence to discuss certain subjects on which they are real authorities.

However, I am now suggesting that a cooperative program of fundamental research be sponsored and directed by the A. I. S. to the end that not only will we all learn more about our favorite flower, but also that thereby we may find the way to the systematic improvement of the iris as a horticultural plant.

It is my personal conviction that anyone who thinks enough of a flower to make it his principal gardening interest should likewise accept the responsibility of undertaking some definite research project, even on a very small scale, of developing and improving the species or genus of his choice. Such research is not only fascinating, but is also constructive, and even occasionally may prove slightly profitable, although the profit motive should not be even incidental to the program I have in mind.

Unexpected Results

To illustrate my thesis, I shall cite the circumstances that led to this present suggestion. Since 1939 I have raised and bloomed 654 seedlings deriving from 36 seed pods of a recent Dykes Medal winner which has notable recessive characteristics. Most of the pollen used came from several of the better white varieties. Not all of

these pods came from my own pollinations, for 12 pods full of seed had been furnished me without record of the pollen parents. Hence, although none of my own pods had been the result of self-fertilization, it was not impossible that some of the pods supplied had been the result of this process. Unfortunately for strictly scientific results, some of the "father unknown" seeds became mixed one year with seed of known paternity. However, a tabulation of the flowers produced by these 654 first-year seedlings shows that 63 per cent of them were of a type to fall in a group resembling either the parent or the two maternal grandparents. Twenty-five per cent of the seedlings were miscellaneous bicolors and blends, while the remaining 12 per cent were a general hodgepodge of reds, violets and whites.

As I tabulated these completely unexpected observations for what they were worth, three thoughts occurred to me. The first was that I had seldom seen published even such simple breeding data as those were.¹ The second was that the characters considered recessive had in this particular group of crosses assumed an altogether surprising dominance. The third was that although these percentages were interesting, they were by no means conclusive until proved by additional checks under different conditions. For example, the seed that didn't germinate the first year might have been the expression of other and different ancestral traits. I don't know whether such is the case, but it is not impossible that some species like *I. cypriana*, *I. mesopotamica*, *I. trojana*, etc., require a hot and dry baking period for post-ripening rather than a damp, low temperature period like the northern species. If I had waited for the second-year germination my percentage of blends and blues might have been much higher.

There are probably hundreds of records similar to mine in the files of the amateur and professional iris breeders of the country. Why more basic information has not been published, I don't know; or perhaps it has been published and I have not yet found it. I do know that the publication of such results by others would go a long

¹Some interesting and worthwhile articles on iris breeding technique and results that have appeared in the A.I.S. BULLETIN are:

Concerning Records, K. E. Steinmetz, p. 61, No. 62, June, 1936.

Report from New Jersey, Graham L. Schofield, p. 90, No. 64, February, 1937.

An Iris Breeder's Records, Charles E. F. Gersdorff, p. 18, No. 69, April, 1938.

My Experience in Iris Breeding, L. Merton Gage, p. 58, No. 76, January, 1940.

Resolutions on Breeding, Earl E. Evans, p. 39, No. 80, January, 1941.

way toward rationalizing iris breeding.

For no good reason I have never selfed this particular variety and I did not do so this year. However, after making this tabulation, it seemed that the fixing of the variety would not offer too many difficulties, so from the remaining progeny that I had not yet scrapped, I selected eight that in flower and plant characteristics were hardly distinguishable from the variety itself. These I have planted separately and next year plan to self-fertilize some of the blossoms; to cross-fertilize in the group some of the others, and to back-cross both ways the remaining ones. About this time in 1947 I should have some tangible results to report, probably an account of a grand outbreak of second-generation recessives.

Help Wanted

Maybe some other member has already done all this or something similar to it. If so, I wish he would report on his work and perhaps save me much duplicate effort. It would seem, however, that in the course of six to ten years, it should be possible to so fix several varieties as to warrant their classification as true varieties coming true to seed and having definite dominant and recessive traits when crossed with other reasonably true varieties.

It is at once apparent that while my own program of stabilizing some varieties is in progress, I will need to learn of other true varieties with which I can breed these varieties for the purpose of determining the transmission of traits under various genetic conditions. This is where the other members of the A. I. S. come in, for it is my proposal that every breeder, amateur or otherwise, who has the time, space and inclination, choose a breeding project interesting to him, and file it, together with an outline of his contemplated program, with the Editor of the BULLETIN, for classification and listing. Each subsequent year in some regular issue of the BULLETIN a progress report should be presented and, if possible, preliminary conclusions may be drawn.

It is to be emphasized particularly that the primary purpose of these projects is *not* to originate new clons for introduction to commerce, but for the acquisition of basic knowledge regarding the genus iris; especially information relating to iris ecology, histology, morphology, ontogeny, pathology and genetics, although there is no reason why cytology, etiology and phylogeny should not be included if someone wishes to so direct his personal research.

These “four-bit” words may be collected and expressed as much simpler-sounding projects. Although there are probably as many worthwhile projects as there are members of the Society, a few of the outstanding ones may be listed as suggestions. None of those listed may be acceptable as such to an individual researcher, but it may remind him of something that he would like to find out for himself and on which he would like to do some research work. (None of these is a short term project because we are already pretty well posted on the easy information.) Here they are:

1. The establishment of a good, modern, pure-white iris as a true variety (or for about 50 other colors, tones, or combinations).
2. The determination of the hereditary traits of a true variety of iris (and all true varieties).
3. The relation of environment, heredity, diseases and other related factors to iris rot.
4. Symbiotic relationships of iris with other plants.
5. The influence of environment on varietal characteristics and the development of differential populations.
6. The development of rot-resistant iris varieties (also resistance or immunity to leaf spot, etc.).
7. The development of an oversized rhizome variety (also development of stem-proliferation and other special characteristics).
8. The synthetic fertilization of iris (by hormones and otherwise).
9. Induced mutation in iris by chemical, physical or other means.
10. The hybridizing of hitherto uncrossed species, such as *I. pseudacorus*.
11. The study of the economic value of iris, as Dr. Carver did for the peanut and sweet potato.
12. The “running-out” of iris clons, including studies of clonal viability under different environment.
13. Progeny testing of Dykes Medal eligibles. (An iris is no better than its progeny.)
14. Determination of cultural requirements and idiosyncrasies of rare and hard-to-grow species. (Is there a climbing iris in this country?)
15. The effect of potash and other nutrients on iris growth and health.

These are only some of the iris breeding projects that really are needed and that will provide your hobby with greater fascination. Because of the ease and convenience with which the iris lends itself to breeding (compare peonies, lilacs, crabapples, clivias and chestnuts), the number of amateur iris breeders with only one objective is legion. But why be a member of the herd? Instead of playing the thousand-to-one shot for a new clon that may be worth introducing on an already oversaturated market, why not undertake a breeding project where you will have something really worth while in the way of iris information or knowledge instead of having only a flock of vexatious seedlings?

It seems to me that community breeding projects offer an excellent opportunity for maintaining interest in local iris clubs, which all too frequently stagnate in the doldrums between shows. Interest would be added to shows by exhibits of rare and hard-to-grow iris, or by new inter-species hybrids, or by induced mutations, or by culinary, cosmetic or other products in addition to "powdered orris root," to mention only a few of many possibilities. It is surprising, also, how many people are interested in amateur genetics when the opportunity offers. By giving friends and neighbors the chance to help in your iris romances, you may stimulate enough interest in your work to form the nucleus of your neighborhood iris club. And that is what we all need—more iris lovers and more members for the A. I. S.

Between scattered irisarians it should prove intensely interesting to form round-robin clubs to cooperate in carrying on the various phases of some mutually interesting breeding problem. I for one would rather read the reports of such round-robin breeding clubs with their trials and errors than I would endless pages of varietal notes which, for the most part, are only confirmations or expansions of honest catalog descriptions.

It seems to me that once past the naive elementary stage of iris breeding, an irisarian should be known and respected more for his real contributions to iris knowledge and for his development of the genus than for the number of new clons he has been successful in introducing.

RECOGNITION FOR DWARF IRIS

H. M. HILL

■ OUR DWARF IRIS section should be given more consideration, more dignity. Some nurserymen call them “baby iris,” but they do *not* grow up! Perhaps we should not repudiate advertising—and we all do love babies—but without question these small ones are deserving of more distinction. Dykes, whose tales of many iris pilgrimages to far countries have encouraged all American iris fans, gave the dwarfs high praise for their beauty and usefulness. In a listing of thousands of iris, our *Check List* shows a liberal percentage of dwarfs, but the average commercial grower lists them briefly and on the back pages. One leading grower catalogues about 2,000 iris, of which only 30 are dwarfs.

After growing iris for 50 years, we have come to the conclusion that more attention should be given to the dwarfs. We have done some hybridizing for 20 years, but we began with dwarfs less than ten years ago. Even with the proportion of dwarf crosses running about one to six of the tall bearded, the dwarf seedlings show by far the greater improvement.

The strides made in the tall bearded classes have been so marked that 90 per cent of the old sorts have been discarded. Since the turnover in new ones is so rapid, the amateur who cannot afford to keep up with the procession has little chance really to improve the parent stock he uses.

On the other hand, the dwarf field has barely been touched and chance for improvement is much greater, the increase in plants is more rapid and the results in bloom come sooner than others. Sometimes in only one year after seed we have had occasional fall bloom from seedlings that came up in the spring after late fall planting. We are so certain that the dwarf field offers rich rewards for amateur growers that we urge iris fans generally to try the midgets and other small types.

Following Mr. Cook's lead in crossing on ARENARIA, we have found this cross very simple with many dwarfs, as the pollen is potent and the plant seeds freely. ARENARIA itself does not do well in our hot and dry climate, but by keeping it in the shade and on the north side, we have grown it for several years and bloomed it freely nearly every year. We have supplied sand which our poor prairie soil lacks because the stoloniferous character of dwarfs re-

quires it. I remember that Dykes thought the stoloniferous character nearly related to the rhizomatous; we think them only one step apart—from creeping to walking.

We have been thankful that the pod parent seems to control the plant character and that our successful crosses have been altogether rhizomatous. Thus far we have been unable to germinate any of the small hard pellet seeds from ARENARIA, but we think our failure is due to the fact we have tried to germinate the very small seed in outside beds as we do the ordinary iris seed. Often it does not mature because of hot days, and it is probable that this chaffy seed will not germinate; but even the sound seed is so small and hard that germination is difficult. We hope that others, by more careful handling, will succeed where we have failed. Probably plants from the ARENARIA seed would be stoloniferous.

Dykes praises the bright golden color of ARENARIA with the orange beard. It has extended falls, making it ideal for viewing from above; and the stems are neat and graceful. Each stem bears two flowers that open a day or two apart, which offsets the short time each bloom lasts—one day, and into the second day occasionally. Our first hope in using ARENARIA was to get an ideal yellow midget of rhizomatous character, and this has worked out nicely. Mr. Cook's KEEPSAKE has ideal golden yellow color, but coming from old SOCRATES, it has rather tall stems and the loose form of flower with poor substance, especially in the standards; but a cross with YLO gave us a neat low stem with bright flowers and extended falls. Another cross gave us a partial variegata with the same low stem and neat flower with red spots in the falls. Other crosses have shown the possibility of getting all colors as we have already got blue, reds and a misty pink from ROSE MIST. So far we have no whites—but we hope for the ideal midget white as this color is needed in the first early midget class.

Of the old and very earliest midget, true pumilas, or stemless iris, ATROVIOLACEA is the first to bloom and AZUREA is the next, and both are good; but, unfortunately, they have little pollen and are shy seeders so we have little success in crossing with them. Mr. Sass' ELF QUEEN is a very fine and pure white midget in stem, but blooms with the later dwarf class that have taller stems.

The next division of dwarfs to bloom, those with eight-, ten-, and twelve-inch stems, is the most important in numbers, and we are very fortunate indeed that Mr. Sass devoted so many years of

careful and painstaking work to the improvement of this division. A recent letter from Mr. H. P. Sass says :

“Breeding with dwarf bearded iris has been much neglected, caused perhaps by the great demand for the large and tall bearded. The range of bright and clear colors in dwarfs is rather small, but by breaking up these, a great variety of blends have appeared, including near *amoenas* and *variegatas*. Most of these are lacking in luster, but could be improved upon by selective breeding.

“I used SOCRATES a good deal in breeding, and from this strain selected TONY, ROSE MIST, and TITANIA. SOCRATES, as I have it, is a true *chamaeiris*. The flowers are dark red purple in coloring with slender divisions. The parentage of SOCRATES is given as OLBIENSIS × KOROLKOWI. My SOCRATES has no *regelia* blood. I received mine from Bertrand Farr 25 years ago.

“LADDIE BOY came from a *pumila* crossed with an intermediate, and AUTUMN QUEEN from a dwarf white rebloomer crossed with AUTUMN KING. Jacob Sass’ hybrids BALROUDOR, STORMY DAWN, BLUE TOPAZ, and GRAY CLOUD are from *pumilas* crossed with *regeliacyclus*. All of these are quite sterile, but I managed to get several seedlings from BALROUDOR by crossing it again with a *pumila*. One of these is a bright red-purple *pumila* on ten-inch stems and a vigorous grower. It has the dark onco blotch below the beard.

“PIXY appeared in a block of tall bearded seedlings, parentage unknown. It is good for breeding table iris, but the best source for breeding these is *I. aphylla*. I crossed it with SIR LAUNCELOT and AUTUMN KING and got a whole lot of red, blue, and other colors, on low-branching stems inherited from *I. aphylla*.

“PALTEC was raised by Dennis of France and is a hybrid of *I. tectorum* × EDINA. The name is an abbreviation of *I. pallida* and *I. tectorum*.

“QUIVERA and a great many other late flowering varieties are now classed with the intermediates and can not very well appear in this write-up. All three classes, the dwarf, intermediate and tall-bearded are now called as one group, *pogon iris*. The *oncocyclus* and *regelias* are also *pogon iris*, but here the species name has been left to differentiate them. *Pumila* for dwarfs is also in use.”

We tried many of the older varieties and quite a lot from other hybridizers, but after years of testing have decided that Mr. Sass’ sorts are the best in most classes. TONY is outstanding in the red class. We have had PUCK for years, and it is quite similar to TONY, but it has not stood the test of time in vigor. ROSE MIST is just as fine in the misty rose pink class. We tried for years to step these down to a more midget size and finally got one red, a little deeper in tone and with a little smaller bloom and more slender stem than TONY. Now we have seedlings from both TONY and ROSE MIST by ARENARIA that are much smaller in bloom and shorter in stem, but these are yet too new to distribute at low prices. We think AUTUMN QUEEN one of the most notable of all the many fine new iris contributed by Sass, and it pleased us very much that it was

mentioned in the biography of Hans Peter Sass in the last *Check List*. It is a pure white self of unusual perfection in form, excellent in substance, and ideal in stem. It stands absolutely supreme in the reblooming class as it gives bloom every month during the spring, summer, and fall, and this is due to its vigorous growing habit with rapid increase. PIXY is unique in color and quite dwarf. Classed as a blend, it has some of the attractive tones of old JUBILEE and blooms with the tall bearded section.

Mention should be made of a few of the older dwarfs of such excellence that they are rightly included in any list of good ones. ENDYMION is a rich claret of neat form and low stem. This is sometimes credited to Miss Sturtevant because of her origination of a tall bearded iris of the same name, but the dwarf came from Sam Birchfield who made a speciality of dwarfs; and while I tried a number from him, this is his best so far as we know them.

GRAMINEA is another well formed neat garnet red. There seems too much confusion of this with the many forms of dwarf variety GRAMINEA in the *Check List*, but this confusion is due solely to neglect in using the proper abbreviation after each. A further confusion, however, exists in the *Check List* in that the abbreviation "Bon." is used both for Lee R. Bonnewitz and for Mrs. G. R. Bonnistell, of Canada. We are not informed as to which of these hybridizers the origination should be credited.

MAROCAIN is listed as a blue with red-purple tones; it often shows quite deep blue in evening light and red-purple in morning light. The quality and form are fine, and it is a strong grower and a very free bloomer. Good old NEGUS is still the brightest blue bicolor and is always neat, strong and free.

To save space, we will mention in a third group, late-blooming dwarfs, pogocyclus and other hybrids, and table iris. The excellence of most of the varieties in these three groups would justify separate divisions. LADDIE BOY, one of the finest of all dwarfs, a deep pure blue of fine form, gives two or three blooms to the stem quite late in the season. In dwarf variegatas of the second season, we and Mr. Sass have had several, but none of very good quality, and we have discarded them. But a little later, and taller, one is fine. It is FIOR DEL MONDO (flower of the world).

We are indebted to the Williamsons of Longfield Iris Farm for a number of the best small iris and credit is due them for the first

listing and introduction of table iris. Among these Williamson sorts, none is more distinctive than ZINGARA, quite brilliant in its red, yellow, and orange tones. KINGLET is deep golden yellow on graceful stems up to 24 inches. PEWEE has quite tiny white bloom on graceful stems. DAYSTAR (Williamson '41) is particularly outstanding in this group. It is dainty and jaunty, of creamy white color, with cadimium tints in the haft and brilliant red-orange beard, erect and perky as a drum major. This dainty Miss is so new and rare that it can be supplied only as it increases; meantime, be content with PEWEE. The English (Orpington) origination ARIEL, listed D.B., is our best. It is the best branched in the class, has very graceful stems, and is a very free bloomer. LODESTAR, a very brilliant variegata and late bloomer, as it grows here, seems to belong in the list of table iris, but it is called tall bearded in the *Check List*. We have some very graceful plicatas in this class and may select one or two to name. LA BOHEMIENE is a French introduction of 1926 and is listed as a tall bearded in the *Check List*, but it is very low growing, 18 to 20 inches. Cooley listed it for several seasons. It is of such unusual form and color (russet red veined cream and buff) and so free blooming that we class it among the top table iris.

The Whiting Gardens have had a number of small iris among their superb collection of tall bearded sorts, and one of these, DAINY BESS, Mrs. Whiting speaks of as a true table iris. It is sky blue in color and has small, dainty flowers and grassy foliage. PRISCILLA, appearing in their garden in 1942, appealed to me as the very purest white iris I had ever seen. These varieties seem to grow well in the home garden but have not been so happy in our heat.

In our catalog we will list some hybrids of pogocyclus, regelia-cyclus, Evansia, etc., together. The Jacob Sass group are popular novelties with us. Some writer has said that mantels are not adapted to showing iris, but in BALROUDOR we have the exception. Its stems placed in a low bowl on the mantel will at once curl gracefully down and the bloom turn up at the right level for showing. Outside it snakes all over the surroundings, but is so attractive that it sells well. GRAY CLOUD and STORMY DAWN make up a trio of genuine novelties that are attractive in unusual color combinations of soft blue, gray, olive, and purple tones.

PALTEC, as Mr. Sass points out, is an abbreviation of *I. pallida* and *I. tectorum*. *I. tectorum*, the Chinese roof iris, does not do

well here, but PALTEC grows vigorously and is a very attractive addition to the free-blooming blue class.

PESHAWAR we got from Mr. Schreiner and he calls it a hybrid of mixed breeding. We cannot trace it, but orphan though it may be, it is so neat, smooth and well rounded in form and so rich in its brown-purple tones that it is a great favorite here. It has minute markings and dots but at a distance is, for all practical purposes, a fine pure self.

IRIS RATINGS--1944

<i>Name</i>	<i>Originator</i>	<i>Rating</i>	<i>No. Votes</i>	<i>High</i>	<i>Low</i>
ACTION FRONT	Paul Cook	90	12	95	87
ALZA HOLA	Snyder	88	10	93	75
BANDMASTER	Hall	89	7	90	86
BERKELEY GOLD	Salbach	90	8	93	88
BERTHA GERSDORFF	J. Sass	87	5	93	85
BLACK AND GOLD	Kleinsorge	86	7	92	80
BLUE GLOW	Nicholls	88	5	90	86
BRIGHT MELODY	Snyder	92	8	95	89
CARILLON	Wills	89	5	90	88
CASA MORENA	De Forest	89	9	91	86
CHIEF POKINGFIRE	De Forest	88	11	90	86
CHIPPEWA	Salbach	86	7	88	84
CHIVALRY	Wills	90	18	92	87
CLARET VELVET	Weed	87	8	90	82
CLOUD CASTLE	Graves	88	6	89	85
DIVIDEND	Douglas	88	5	90	85
DIXIE SUNSHINE	Milliken	88	5	92	85
DREAMCASTLE	P. Cook	91	13	96	84
DREAM GIRL	Hall	88	7	90	85
DOWN EAST	Tobie	90	7	90	89
ERIC THE RED	Whitney	90	5	91	89
EXTRAVAGANZA	Douglas	90	10	93	86
FANTASY	Hall	88	6	90	84
FIRE CRACKER	Hall	88	11	92	85
FLAMELY	P. Cook	88	11	90	84
FRANCELIA	McKee	90	10	92	89
FULL MEASURE	De Forest	87	12	90	86
GARDEN GLORY	Whiting	91	6	96	87
GOLDEN SPANGLE	Cassebeer	88	7	89	86
HARRIET THOREAU	P. Cook	90	5	93	86
HONEYFLOW	Tompkins	90	6	95	86
INSPIRATION	Hall	88	6	90	86
KATHARINE FAY	Fay	90	10	93	86

<i>Name</i>	<i>Originator</i>	<i>Rating</i>	<i>No. Votes</i>	<i>High</i>	<i>Low</i>
LAKE GEORGE	Smith	92	5	96	87
LORI MAY	De Forest	87	11	89	85
LOTHARIO	Schreiner	88	9	90	84
MAIDEN BLUSH	Hall	86	9	89	80
MAJENICA	P. Cook	89	9	90	85
MASTER CHARLES	Williamson	88	5	90	85
MANDALAY	Hall	88	7	89	84
MEXICO	Kleinsorge	88	8	93	84
MISTY ROSE	Mitchell	87	5	89	85
MOONBEAM	H. P. Sass	89	5	90	87
MOONLIT SEA	J. Sass	87	11	92	82
MOUNT HERMON	Lowry	90	7	92	88
NED LEFEVRE	Lapham	88	12	93	85
NOONDAY SKY	Weed	87	5	89	85
OREGON TRAIL	Kleinsorge	87	7	91	80
ORMACO	Kleinsorge	88	6	90	85
OVERTURE	Hall	88	12	90	85
PEACHGLOW	Kleinsorge	88	7	91	84
PRETTY PENNY	De Forest	87	5	89	85
REDWARD	P. Cook	89	9	93	85
REDWYNE	McKee	89	5	90	89
SEQUATCHIE	Caldwell	88	11	92	85
SERENATA	Milliken	89	6	91	86
SHANNOPIN	Pillow	88	5	92	85
SHARKSKIN	Douglas	89	8	92	86
SIERRA PRIMROSE	Essig	88	5	95	85
SILVER AND GOLD	Tobie	87	5	89	85
SOLID MAHOGANY	J. Sass	91	11	95	87
SOUSON	Essig	88	9	91	80
SPARKLING BLUE	Grant	88	6	89	86
SUZETTE	Knowlton	91	8	92	89
TEA ROSE	Whiting	90	5	94	86
TIFFANJA	De Forest	89	15	91	84
TOBACCO ROAD	Kleinsorge	89	10	96	82
VIRGIN SNOW	H. P. Sass	89	5	93	89
WHITE WEDGEWOOD	Grant	89	8	91	88
WORTHINGTON	P. Cook	90	6	96	87

PERMANENT RATINGS

<i>Name</i>	<i>Originator</i>	<i>Rating</i>	<i>Number Votes</i>	<i>Number Regions</i>	<i>High</i>	<i>Low</i>
ALBA SUPERBA	J. Sass	88	30	6	95	80
ATROUS	Gage	86	20	7	90	80
AZURE SKIES	Pattison	89	39	8	91	85
BLUE ZENITH	Whiting	87	23	9	92	80

<i>Name</i>	<i>Originator</i>	<i>Rating</i>	<i>Number Votes</i>	<i>Number Regions</i>	<i>High</i>	<i>Low</i>
CORAL MIST	Grant	87	22	7	89	84
ELMOHR	Loomis	90	60	13	95	86
FRANCONIA	Graves	89	29	7	92	85
HOOSIER SUNRISE	Lapham	88	24	8	94	86
LADY NAOMI	Fay	86	36	10	95	78
LAKE HURON	J. Sass	87	32	10	90	82
LATE SUN	De Forest	87	35	10	91	75
MINNIE COLQUITT	H. Sass	88	38	10	94	84
MISS BISHOP	J. Sass	88	22	8	90	83
MOONLIGHT MADONNA	J. Sass	89	37	11	94	85
NIGHTFALL	Hall	88	32	10	92	83
NIGHTINGALE	Hall	87	31	9	92	83
OLA KALA	J. Sass	89	44	11	93	81
PINK REFLECTION	P. Cook	89	34	8	94	82
PRISCILLA	Whiting	87	36	8	90	81
RED AMBER	Loomis	88	29	12	91	82
REMEMBRANCE	Hall	88	39	10	91	85
SUNSET SERENADE	J. Sass	89	37	10	92	79
THE SENTINEL	Hall	86	32	10	90	80
THREE SISTERS	De Forest	85	38	11	89	75

THE FASCINATING MOHR IRIS

ROBERT SCHREINER

■ PROBABLY MORE than any other iris variety, WILLIAM MOHR, originated and introduced to the public in 1925, is the subject of universal discussion and popularity. How few varieties of the same vintage can boast such a period of popularity! Many have long since disappeared from the scene. Yet WILLIAM MOHR continues today to be one of the centers of attraction in the garden. Its unusual form and different coloring are never-fail attractions both to the uninitiated amateur and to the critical fancier. Its evaluation in true perspective will be recorded by horticultural historians. I think it is safe to say that the length of time an iris is cataloged is quite an accurate indication of its popularity. This iris, too, probably passes all records for the greatest number of roots of a given variety the commercial people have handled during the period of its reign.

Iris WILLIAM MOHR was developed by one of America's pioneer hybridists whose work in development of a new strain of iris, mainly combinations of the blood of *I. mesopotamica* and the garden iris

then extant, was an achievement of great merit. Mr. William Mohr, for whom the iris was named posthumously, perished in an auto-rail accident. At the same time his wife, Frieda Mohr, who was in the same car, succumbed to injuries from this accident. There is no telling what the hand of this hybridizer might have created. Iris FRIEDA MOHR was named after his wife and is one of Mr. Mohr's seedlings.

The iris WILLIAM MOHR and FRIEDA MOHR, another of Mr. Mohr's originations, are not the same type, although this is a popular misconception. FRIEDA MOHR is one of the tall bearded garden iris, while WILLIAM MOHR is a rare type of hybrid, a combination of a rare species from Armenia, *I. gatesii* crossed with the garden iris PARISIANA. From *I. gatesii* it inherited its unusual characters and coloring. Also keeping in mind the derivation of its ancestry we can understand much about its cultural requirements. It is not the easiest iris to grow. Some people in certain sections have considerable difficulty with it.

The culture of WILLIAM MOHR is primarily a matter of adaptation to certain features inherited from the parent *I. gatesii*. *I. gatesii* is an iris species from the dry desert country of Levantine, Asia. Mr. Mohr was fortunate to flower this rare species in his garden and even more fortunate in making this successful cross. WILLIAM MOHR does well in California and those states of the West which have dry summers. It thrives exuberantly in the desert irrigated regions and is less happy closer to the ocean where more frequent rains and fogs are less to its liking. We in Minnesota and growers in a great portion of the Midwestern United States are quite successful with it. The degree of success seems to be greater in regions with smaller amounts of rainfall and low humidity. Our soil in Minnesota is varied, but whether it is clay, silt loam, or sandy loam, our land is laid over to a great extent with a limestone strata and is basically neutral, or close to neutral, in reaction. In moist years WILLIAM MOHR succeeds best in a sandy soil which has quick drainage. The heavy clay soils of central Iowa and Illinois with their lack of quick drainage are less adaptable to successful growing. As we progress farther East, especially on the Atlantic Seaboard, the moister situations pose more of a problem. It seems quite logical that the big question of success in growing this iris is one of moisture and how closely we can simulate a more arid condition. Within all the area I have mentioned some cultivators have had

good success growing this iris, while in close proximity to them others may meet with almost general failure.

There are certain general recommendations for growing WILLIAM MOHR and other iris of the same hybrid race, the pogocyclus. Study the matter of exposure. If a site may be chosen that is a veritable sun trap, all the better. Choose the hottest corner in your garden. Next consider the soil, not only its surface and depth but its composition. Does it drain water quickly? I would choose or develop a soil pocket for this iris that had the optimum in water perforation. Use liberal quantities of sand and small gravelly material to give the sharpest drainage possible. We have found it particularly advantageous to incorporate liberal quantities of ground limestone rock, of the kind used for surfacing driveways or tennis courts. It is a very effective conditioner and adds a source of lime which iris of this class particularly like. WILLIAM MOHR is a shallow-rooting variety so we have found it advantageous to divide the stock at least every third year, preferably every two years. Steamed bonemeal is one of the best fertilizers to use.

There is a disease present in WILLIAM MOHR which seems to affect iris of the oncocyclus section generally. It is known as mosaic. The foliage has irregularly colored areas of different shades of green. Such a trouble decreases the plant's health. Fortunately for the garden iris, this disease does not seem to bother the common hybrids. Iris which show extremely irregular foliage coloration should be discarded as a precautionary measure. Not much experimental work has been done on this disease.

One of the first surprises to plant breeders was finding WILLIAM MOHR devoid of any pollen, nor will this plant seed to any extent. Oftentimes a pollination had been performed and a nice seed pod began to form. It looked very big and green and even felt hard; yet, a little later this very pod would brown too soon and contain nothing but an abortive attempt at forming a seed or so. There is no telling how many flowers of WILLIAM MOHR have been pollinated since this iris was first put into commerce.

There are, however, some rare exceptions to this sterility of WILLIAM MOHR, so fortunately we are able to continue this unique line of breeding. There is an early record by either Mr. Mohr or Mr. Sydney Mitchell, Mr. Mohr's successor, noting the setting of one seed. Likewise there were two reports of seed setting in England, one by Sir Mark Collet and the other by Mr. B. R. Long,

whose three seedlings perished before they could mature.

However, it remained for Mr. C. G. White, of Redlands, Calif., to achieve the honor of raising the first WILLIAM MOHR seedling (WILLIAM MOHR $\times$ large cream seedling of Prof. Mitchell). It was named MOHRSON (1935) and is available in trade channels today. Mr. White is one of America's leading hybridists whose work in the line of raising new oncocyclus hybrids makes a most interesting chapter in the story of iris breeding. Reports have appeared in the iris BULLETIN on his brilliant work. Following closely on the advent of Mr. White's MOHRSON, Mr. Sydney B. Mitchell raised a seedling of WILLIAM MOHR. It was never offered to the public as its color was rather an undistinguished lavender. Of interest, if I have the records correct, is the fact that Sydney Mitchell's hybrid was sired by the same cream seedling Mr. White utilized. Prof. Mitchell guaranteed this seedling to set seed on anything with which it was crossed.

I think it is interesting, too, to follow the chronological additions to the Mohr family. Following closely on the heels of the two early seedlings was Mr. Jory's GRACE MOHR (1935) (WILLIAM MOHR $\times$ CONQUISTADOR possibly). At its time it was the tallest and most branched of its kind. Then two years later, in 1937, Dr. Kleinsorge developed ORMOHR (WILLIAM MOHR $\times$ ANAKIM), a striking hybrid and the largest branched one to that date. At the same time he developed ORMOHR, Dr. Kleinsorge had a brother seedling from the same cross which was considered too similarly colored to be introduced. Three years later two new seedlings were offered from Frank Reinelt, of delphinium fame. They are CAPITOLA (WILLIAM MOHR $\times$ IB-MACRANTHA), 1940, and SOQUEL (WILLIAM MOHR $\times$ SUNOL), 1940. At this same period Mr. Reinelt had raised a seedling of a cross of WILLIAM MOHR $\times$ SAN FRANCISCO, but it seems to have disappeared.

In 1942 Dr. Loomis' newest seedling ELMOHR (WILLIAM MOHR $\times$?) was introduced. It is the most striking in color of the entire series of hybrids. MOHRSON is a dark violet, and the other seedlings discussed above have varying degrees of lavender and manganese violet with the unique color pattern akin to the onco race but not particularly effective. It is significant that these first-generation seedlings all are easier to grow than their parent, WILLIAM MOHR.

Several more WILLIAM MOHR hybrids have been raised. I have been fortunate enough to have made one successful cross of WIL-

LIAM MOHR with MADAME LOUIS AUREAU. It is of particular note as it is the first such hybrid that is fertile to its own pollen. Undoubtedly it will be of great value as a base for future hybridization; it was offered to the public this season. Paul Cook raised a hybrid from WILLIAM MOHR $\times$ F. B. MEAD, the latter a blue plicata, and I understand a Mr. Lindsley of Ohio has a WILLIAM MOHR cross although I have not had personal contact with him on it. One of the newest arrivals in this hybrid class is William Miller's BARRIMOHR (WILLIAM MOHR $\times$ ADOBE). This hybrid is discussed in BULLETINS Nos. 90 and 91. We will flower it here in test with others of this clan. Likewise, I have located and collected a hybrid from Walter Marx of Oregon and another from Mr. Thomas of Salt Lake City. Interestingly, each of these individuals raised a seedling using the same pollen parent, EL CAPITAN. I wonder how much alike their results are. Mr. Marx has several unflowered WILLIAM MOHR hybrids that we await with interest. This enterprising hybridist is going to make his mark in the iris world. I have enjoyed an unusual and interesting correspondence with him and am working in collaboration with him on this iris breeding program.

I have always felt that when Mr. Mohr used a plicata as a parent, he was most judicious in employing a garden hybrid whose color pattern would more likely allow the characteristic veins and dottings of the oncocyclus to be displayed rather than if he had used as parent a variety of solid color such as blue, which probably would obscure the characteristic color pattern of the oncocyclus. Our cross of MADAME LOUIS AUREAU is one example. Paul Cook's hybrid is another, and just this season I received a root of MY LADY (WILLIAM MOHR $\times$ LOS ANGELES) from Mrs. Tharp for purposes of comparison. These iris may prove a valuable base for a plicata race that is different.

Before we finish discussion of the first-generation seedlings of WILLIAM MOHR, let me say that in the last two years several experimenters have reported success in getting many more seeds on WILLIAM MOHR. Both Dr. Loomis and Paul Cook report liberal set of seed, and I do not doubt but that other experimenters are having like success. I would appreciate hearing of these people's experience as this seems to be an unusual chapter in iris hybridization.

A new chapter is just beginning to unfold in the second generation grandchildren of WILLIAM MOHR. The few successful seed-

lings we have been able to raise of WILLIAM MOHR have not in themselves been free setters of seed, although they are better in this respect than their parent. To my knowledge MOHRSON has set a few seeds, although I am not acquainted with any plant derived from it. GRACE MOHR has yielded seed in several cases and I think Mr. Jory will be able to add more to it. To Dr. Kleinsorge goes the honor of bringing out two F-2 of WILLIAM MOHR. One is named ORMACO and is the result of ORMOCR $\times$ AZTEC COPPER; the second, ILLUSION (ORMOCR $\times$ RED CROSS). CAPITOLA has sired several interesting crosses. The most interesting to date is a cross of CAPITOLA with a seedling of ((ALTA CALIFORNIA $\times$ KING MIDAS) $\times$ MISS CALIFORNIA), a yellow seedling of Mr. Salbach's, which gave LADY MOHR, an unusual hybrid with near ash white standards and more yellow tinged falls. It is the first hybrid of this family to have this unusual coloring, an important deviation. I understand likewise that Dr. Loomis has close to 11 seedlings of ELMOCR, so no doubt before too long that fine iris will contribute to our garden's further enrichment.

Perhaps a little explanation of the chromosomal compositions will be of interest to the more technical minded readers of the BULLETIN. As we know, PARISIANA, a plicata iris of Vilmorin's, is one of the older iris and seed parent of WILLIAM MOHR. It is a diploid $2n-24$ crossed with the species *I. gatesii*, which is of a different race of iris whose chromosomal compliment is $2n-20$. WILLIAM MOHR, we have determined by cytological studies, is $2n-22$. I think it is interesting to note that practically all the F-1 seedlings of WILLIAM MOHR are the result of crossing this $2n-22$ with tetraploid $2n-48$. The exception is CAPITOLA, which is a cross of WILLIAM MOHR $\times$ IB MACRANTHA. IB MACRANTHA is a cross of an oncocyclus, *I. iberica* $2n-20$, with a tetraploid, MACRANTHA $4n-48$.

In closing this study on WILLIAM MOHR and its hybrids, I would like to call attention to several characteristics very common to these hybrids. The flowers are usually very broad and round with a broad beard. The center of the flower seems to display prominently a very good view of the style arm of the flower, giving it a decidedly orchid effect. One character of the flowers of this race is their wind resistance. They possess a different type of texture other than velvetiness and stand up well, and so belie the delicacy their appearance would suggest.

I think new deflections in color are just coming. I feel certain

enterprising breeders are going to blend and recombine new characters and colors to give us a race of plants that will make the entire floral world further realize what an epochal step Mr. Mohr made when he first made the cross that produced WILLIAM MOHR. To these great pioneers we owe much of the floral beauty we enjoy today.

IRIS LADY MOHR

SYDNEY B. MITCHELL

■ ABOUT THE middle of March this derivative of iris WILLIAM MOHR threw a casual out-of-season flowerstalk in the Salbach gardens right next to me. This was fully a month in advance of its regular blooming with the earlier tall bearded varieties, so it gave me a chance, while still unharried by the onslaught of the main season, to study what I am persuaded is not only the finest and most distinct of its family, but an outstanding development in iris breeding and a real addition to our gardens. It is, moreover, a good grower and a very free bloomer. Its parentage, which I shall also discuss, is a wonderful example of the many contributions which go to make up a modern iris.

LADY MOHR, though it approaches in appearance nearer to an oncocyclis iris than any other of the oncopogon hybrids from WILLIAM MOHR, is oddly enough a strong, vigorous plant, making foliage and growth much like the tall bearded iris, and with a good yard-high, branched stem which has generally five, sometimes more, flowers. These are very large and of beautifully rounded form suggestive of the better oncos, but with far finer falls. The standards are oyster white—that is, on the blue rather than on the cream side; the falls are an olive yellow—chartreuse will suggest the color—and at the base of each is a lovely large red-violet blotch which radiates out a little into the fall and adds much to the beauty of the flower. The parentage is (ALTA CALIFORNIA $\times$ KING MIDAS) $\times$ CAPITOLA, that is, an unnamed pogon seedling raised by Carl Salbach crossed by (WILLIAM MOHR $\times$ IB-MACRANTHIA) which is the parentage of CAPITOLA.

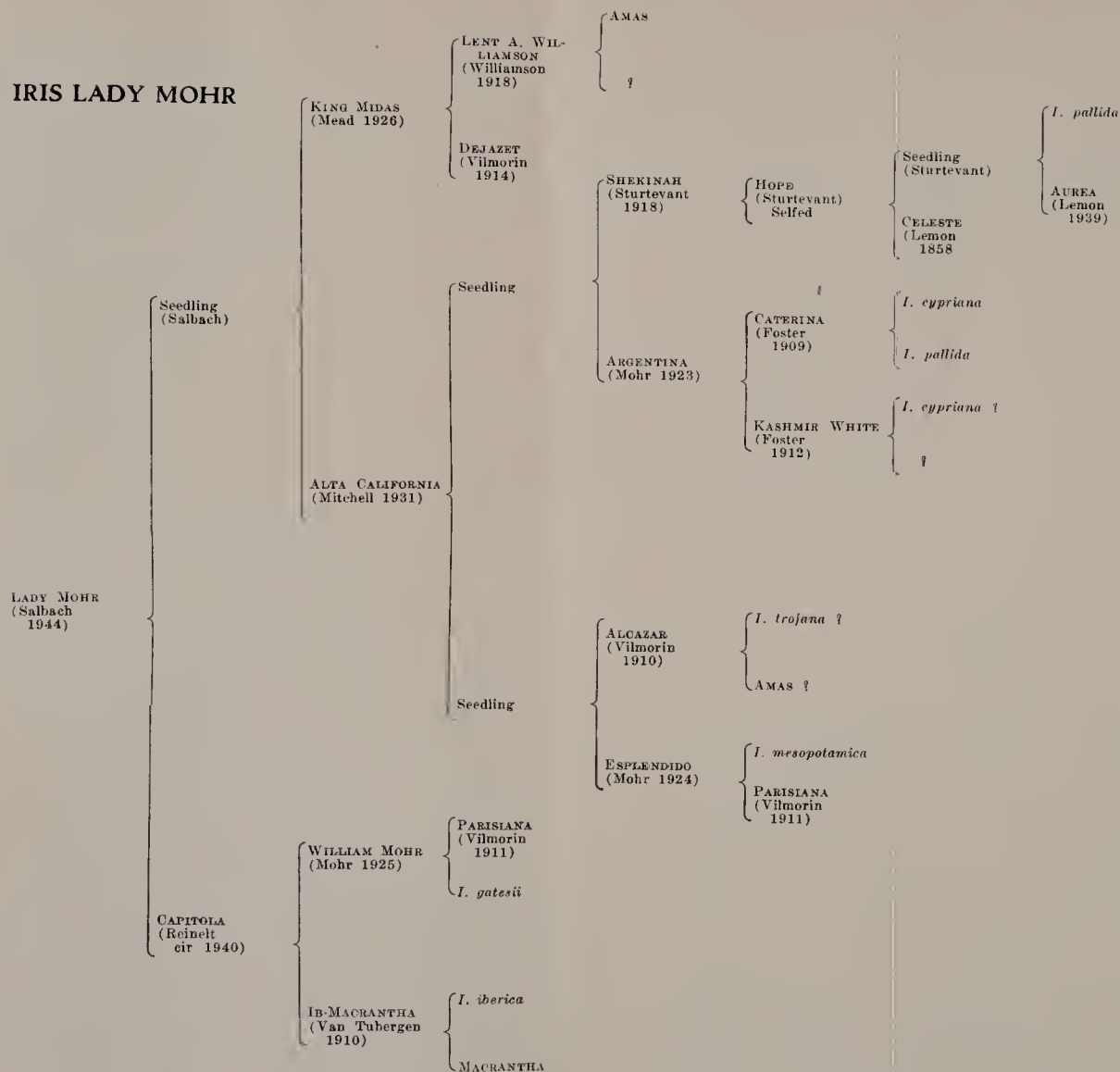
An examination of the pedigree of LADY MOHR will show Carl

Salbach, its breeder, as the top man of a tall, wide, inverted pyramid of the most international character.

Examining this chart, the first personal name we come to is Lemon, a French nurseryman who was introducing bearded iris over a century ago though there is no evidence that they came from hand pollenization. From the wild species *I. pallida*, some collected form, and two of his seedlings, AUREA and CELESTE, Miss Grace Sturtevant, our first great American breeder, raised HOPE. She selfed this and got SHEKINAH, introduced in 1918, taking a great forward step in self yellows. Many years earlier, in 1888, Sir Michael Foster, professor of physiology at Cambridge University, had been responsible for the introduction of *I. cypriana*—not now capable of identification—and its effect was revolutionary, for a cross of it with *I. pallida* gave CATERINA (introduced in 1909) and perhaps also KASHMIR WHITE (1912), though he ascribed a different and doubtful parentage to the latter. This great English scientist was the first real iris breeder and one of the greatest of all time. From CATERINA and KASHMIR WHITE, the late William Mohr raised ARGENTINA, which later passed on its pure white to PURISSIMA. This carries us to an unintroduced seedling, SHEKINAH $\times$ ARGENTINA.

Philippe de Vilmorin, of the famous seed firm of Vilmorin-Andrieux, Paris, France, was interested in iris breeding and, though the varieties his firm introduced have no published parentages, it is possible that their ALCAZAR (1910) came from a cross of *I. trojana* and AMAS. Here we have more French concern with the ultimate parentage of LADY MOHR, as ALCAZAR became one of its forebears. A great factor in California breeding, which all stems back to William Mohr, was his early use of *I. mesopotamica*, which W. R. Dykes, another English iris authority, is credited with having introduced to garden culture from Mardin, Armenia. Mr. Mohr got it through Mrs. J. Dean, the pioneer commercial iris grower of California. Crossing it with PARISIANA, a Vilmorin introduction of 1911 and the best of all the earlier plicatas for breeding, Mr. Mohr raised ESPLENDIDO, which the writer selected from his seedlings and introduced in 1924. From an unnamed reddish-brown ALCAZAR $\times$ ESPLENDIDO seedling I crossed the above-mentioned creamy white SHEKINAH $\times$ ARGENTINA seedling to get ALTA CALIFORNIA, the first tall yellow. As I am by birth a Canadian of English and Irish ancestry and by adoption a Californian, this further

IRIS LADY MOHR



complicates the international responsibility for the ultimate LADY MOHR. But to get its immediate parentage on the seed side, we have to go back once more to AMAS, from which with mixed pollen the late E. B. Williamson, of Bluffton, Ind., raised, and in 1918 introduced, LENT A. WILLIAMSON. His neighbor, Franklin B. Mead, of Fort Wayne, Ind., crossed this with pollen of DEJAZET, a 1914 Vilmorin introduction of unknown parentage, and in 1926 named one seedling KING MIDAS. ALTA CALIFORNIA $\times$ KING MIDAS, a deep yellow unnamed seedling, became the seed parent of LADY MOHR.

Going on to the pollen parent, CAPITOLA, the chart is short and simple. From PARISIANA, already referred to, and the oncocyclus species, *I. gatesii*, introduced from Mardin, Armenia, by Sir Michael Foster, Mr. Mohr raised a single seedling which was his greatest pride and which, when the stock came into my hands after his death, I named in his memory. For years it was apparently sterile. Whether a change in chromosome number occurred it is now impossible to tell, as no early count was made, but after many years Clarence White, of Redlands, Calif., and I both got viable seed by a pogon seedling of Mr. Mohr's, a pale yellow-lavender blend of the utmost unimportance for itself but of great potency as a pollen parent. Others have since found WILLIAM MOHR a possible seed parent; hence MOHRSON, GRACE MOHR, ORMOHR, ELMOHR and, we hope, others to come.

But CAPITOLA, the pollen parent of LADY MOHR, is different as it is itself an oncopogon hybrid. About 1870, from the Transcaucasus, came a new oncocyclus species, *I. iberica*. Using it as a seed parent many years later, the firm of Van Tubergen, Haarlem, Holland, crossed it with pollen of MACRANTHA (which may be the same as AMAS or very like it) and in 1910 offered IB-MACRANTHA. William Mohr imported it and grew it in his Mt. Eden, Calif., garden where it was reasonably strong and healthy but unexciting in its red-purple coloring. Here comes in the first Dutch influence, though whether G. T. Van Tubergen, Jr., or his nephew, John Hoog, actually made the cross I do not know. I got some plants and gave some to my friend Frank Reinelt, by birth a Czech but by adoption a Californian, and now an outstanding breeder of tuberous begonias and delphiniums. He crossed it on WILLIAM MOHR and called the resultant seedling (later introduced by Carl Salbach) after the little seaside settlement near Santa Cruz where he lives. So now we have a further racial contribution. Lastly, Carl Salbach, born in

California of German parentage, combined the two lines, his seedling of ALTA CALIFORNIA $\times$ KING MIDAS with CAPITOLA, and out of a bunch of inconsequential runts came one prize, the lovely LADY MOHR. Little of this breeding could now be repeated. I do not believe that *I. gatesii*, *I. iberica*, or IB-MACRANTHA can be found today.

Carl Salbach tells me he got several sets in 1943 on LADY MOHR by various pogon pollens, and already at this early date of writing some germination has occurred. He also used its pollen and got what looked like some good seed, but it is too soon yet to say whether or not it is viable. It is, however, very important that this wholly different iris, which somewhat resembles *I. gatesii*, should be able to go on to perhaps greater variation. It has taken several Americans, a Czech, a Canadian, a Hollander, an Englishman and two Frenchmen to get us as far as LADY MOHR, which should surely destroy any ideas of self-sufficiency or isolationism in iris breeding.

"HALL OF FAME," 1944, AT SPARTANBURG, S. C.

KENNETH D. SMITH

■ THREE OAKS, the garden of Louise Blake at Spartanburg, holds a charm for me equaled by no other garden, and I frankly admit that if I were limited to visiting a single garden on my iris pilgrimages, this would be the one I would select. It is most unusual because the owner loves everything in it, and the lavish affection showered upon it is reciprocated by the flowers, for they always perform exceptionally well. I have now witnessed this miracle for five years and in no other garden have I seen my creations and those of others grow so well or perform so outstandingly.

Originally the "Hall of Fame" was started by Mrs. Blake as an innovation for her own pleasure to display iris that were sent to her as gifts. But her idea of a home for the iris élite soon became so famous that both sides of her private driveway would not hold it, so it overflowed on both sides of a path 150 feet in length leading to the woodland in back. Sixty hybridizers are now represented, and their three iris are planted in niches measuring at least 9' $\times$ 6'. This large space allows three clumps from each hybridizer to be displayed to good advantage without crowding. These niches are bordered with stones, around which has been planted sedum Stonecrop, whose green glaucous foliage and small golden flowers makes

an effective frame. Pansies, usually matching the color of the iris, have been planted in front, and the combination is quite delightful. The hybridizers of America owe a great debt of gratitude to Mrs. Blake for displaying their creations so effectively and her garden is rapidly becoming an unofficial test garden of the first importance.

As each niche represents a unit, it is important that all three iris preferably should bloom together with uniform size clumps and that their color combination be pleasing. For example, Shuber's niche of DYMIA, NARAIN and TELEVISION have always made an interesting color combination of blue and purple, while MING YELLOW, GOLDEN GLOW and SPUN GOLD in Glutzbeck's niche have been a symphony in yellow. Thus when a hybridizer sends on a newer creation for substitution, the unit is spoiled until the newer plant has become established and forms a clump. I have suggested to Mrs. Blake that the first year these newer creations be planted along an interesting path leading to a retreat at the Scuppernong Arbor where they will be on display. Then the following year they could be moved as clumps to their permanent location in the niche. If this were done, all niches would be uniform and put on outstanding displays at all times.

This year, I had four delightful days at Spartanburg, giving me ample opportunity to judge properly the performance of nearly every iris in the garden and especially the clumps in the "Hall of Fame." Judged as an entity, three niches were most outstanding: Salbach's with large clumps of GOLDEN MAJESTY, DEEP VELVET and California Peach was very magnificent; smaller clumps of THE ADMIRAL, REMEMBRANCE and NIGHTINGALE earned honors for Dave Hall, while my own with large clumps of CAROLINE BURR, VIOLET SYMPHONY and YELLOW JEWEL put on a very pleasing display. These niches were all fine because they had uniform size clumps, their color combination was effective and the group of iris bloomed together as a unit.

For several years, I have been preaching the doctrine that iris should not be judged in the garden on an exhibition stalk but rather should be considered as a garden clump. In the past I had become over-enthused when I saw individual stalks and later regretted my purchases when these iris made clumps.

In this "Hall of Fame" planting, 16 established clumps stood out

from all others and I believe deserve a three-star rating. Taking these up alphabetically, by hybridizers, they are:

De Forest's SALAR. Not very interesting as a single stalk, but quite outstanding as a large clump. There is just enough bloom out at one time so that its interesting color is displayed to advantage, and it does not fade in the South Carolina sun.

Douglas' SHARKSKIN. In an established clump this put on a display that was hard to beat; the flowers are refined and nicely spaced along the stalk so that they are effectively displayed.

Hall's REMEMBRANCE. The flaring large flowers of soft pink on a sturdy stalk fade out to what might be called a lighter OLD PARCHMENT as much of the pink disappears, but it still remains distinctive and interesting. I consider it the best of all the Hall iris.

Lapham's FRANK ADAMS. A colorful clump and down here Lapham's best iris.

Loomis' ELMOHR. In 1942 this iris was the sensation in the "Hall of Fame"; now it is even more impressive as a large clump.

Mitchell's FAIR ELAINE. Always one of the most beautiful clumps in the garden. Year in and year out it performs well.

Nicholl's RED VALOR. Perhaps the most outstanding iris in the "Hall of Fame" and magnificent as a large clump. It grows exceptionally well in this garden.

Pattison's AZURE SKIES. An especially delightful garden clump; planted in combination with its white sister seedling, it receives a great deal of attention.

Salbach's GOLDEN MAJESTY. For outstanding performance this deep yellow deserves top ranking. Every year it performs well and makes the best clump of the deep yellows in the garden.

J. Sass' GOLDEN FLEECE. A distinguished iris both as an exhibition stalk and a garden clump and is grown to perfection in this garden.

Smith's CAROLINE BURR. Mrs. Blake says this iris has a fascination that she finds in few others; the ivory of its coloring, its glistening quality with the faintest suspicion of chartreuse keeps calling her and she finds it distinctive. Year in and year out it makes one of the most outstanding clumps in her garden.

Smith's VIOLET SYMPHONY. Always an outstanding clump; especially beautiful when planted next to CAROLINE BURR.

Whiting's SEA BLUE. Puts on a nice display and is very effective as a garden clump.



Kenneth D. Smith

The bird bath in Mrs. Blake's garden is surrounded with cream colored iris of Essig's Madonna series.

Wiesner's ANNE NEWHARD. This is a distinctive and unusual iris with the standards of medium hyacinth blue edged with the blue-purple color of the falls. When better distributed it will be one of our most popular iris.

Williamson's AMIGO. Usually an intermediate iris about 25 inches in height, but here it is grown 36 to 40 inches and makes a breathtaking clump.

Wills' CHIVALRY. A dark blue iris of fine form and substance that is especially magnificent in a large clump.

Other established clumps not included in the "Hall of Fame" planting that were also outstanding included Dr. Graves' SNOW CARNIVAL, which was massed on both sides of the path leading to Scuppernong Arbor. Its large, flaring flowers were grown on especially tall stalks so that they were displayed to good advantage, and it deserves to be ranked as one of the outstanding newer whites.

For several years Mrs. Blake has banked Essig's Madonna series around her bird bath, which forms a triangle near the end of the "Hall of Fame." The path leading up to this point curves slightly



Kenneth D. Smith

Visitors inspect the "Hall of Fame" at Mrs. Blake's garden.

so that it is rather startling and impressive to see this display for the first time. The soft yellow and cream combination makes the ideal garden planting.

Other outstanding clumps in the "Hall of Fame" well deserving of a two-star rating include: GREAT LAKES, SUNSET TAN, GOLDEN MADONNA, NIGHTINGALE, ARCTIC, DEEP VELVET, THE RED DOUGLAS, GOLDEN TREASURE, YELLOW JEWEL, THE BISHOP, JAVA SKY, ICY BLUE, GOLDEN SPIKE, and SYMBOL. SYMBOL really deserves to be included in the select group and would have been had the hot South Carolina sun not bleached its brilliant yellow color. If planted in partial shade, I am sure that would not happen. It grows beautifully here and the red-brown haft makes an interesting foil to its bright yellow color.

The "Hall of Fame" covers only a small part of Mrs. Blake's garden; the newer creations are planted on the Debutante Terrace, and the late-blooming varieties, in the Adios bed. Everywhere one looks there are drifts of iris, always planted for color combination and effect. As I have said before, it is a delightful garden to visit and it holds a friendship which draws you back time and time again.

ROANOKE GARDENS

LUCILE R. STEEDMAN

■ AS I WRITE this, the 1945 iris season is just 11 months away, too brief a time to get the new iris varieties planted, the seedlings transplanted, all our voluminous notes studied, and the old plantings worked up and fertilized.

This season was entirely too short. The warm weather brought out at one time both the earlier and the late bloomers so that rating had to be quick and fast. One simply had to be in the gardens every day or twice a day to avoid missing some of the new ones. At the same time, it was the best season, not only for iris but for all flowers, that I can remember. Nearly every iris bloomed and gave a good account of itself. Even MELDORIC, which had not bloomed in six years and had a rhizome a foot long, sent up a bloom stalk. What must have been the surprise of this Rip Van Winkle, who had gone to sleep seven years ago thinking himself to be one of the best of the dark blue iris, to awake to find himself completely elbowed off the stage by such newcomers as NIGHTFALL, INDIANA NIGHT, SMOULDER, and BLACK BANNER, just to mention a few. I had thought myself a very patient Griselda to have kept MELDORIC all these years without a bloom until I read the other day that Sir Michael Foster had kept an iris 20 years, had cared for it and tended it all that time without ever seeing a bloom.

Other iris, too, that had not been doing well in the past were much better this year. GOLDEN SPIKE and SPUN GOLD, which heretofore have had very erratic spikes, had normal stalks with fairly good bloom. SNOW FLURRY had better health than usual and on a two-year plant in my garden had four bloom stalks! These last three may have remembered that they are all three candidates for the Dykes Memorial Medal this year and were trying to make up for past performances. Even NOEL had one increase among six one-year rhizomes, which means that it must have been a good season in Roanoke.

Now for varietal notes. Let's begin with the light blues, always favorites of mine. Three new varieties in this class were making their first appearance. CHIVALRY, CLOUD CASTLE, and LAKE HURON were easily first. CHIVALRY, a medium light blue with fine carriage and beautiful shape, is one of the finest in any color class and will be with us a long time if it lives up to its first-year performance.

It has the nice flaring shape of ALINE and ELEANOR BLUE and is much larger. CLOUD CASTLE is a larger GLORIOLE which lasts over a long time. It tends to flop a little in our hot weather, but the color is lovely. LAKE HURON is darker and bluer than CHIVALRY. In fact, when I saw it, I thought, "Here is a true blue." But when one holds up a bunch of blue flax flowers against any of these iris, they show a lavender tint. There is still a drop of red in their blood. But LAKE HURON is as blue as any. BANDMASTER, too, is a newcomer which is quite tall with a good blue color, good texture, and stout stalks, but neither it nor BLUE ZENITH could stand the acid test of flax flowers for color comparison. We just don't seem to have a really blue iris yet.

BLUE DELIGHT, which had not bloomed last year, made up for its defection this year with plenty of bloom on a two-year plant. Of all the iris I know that are priced over \$1.00, this would be my choice if I did not already have it. Mr. Fay had a very lovely numbered seedling like GLORIOLE, too, but just a shade darker. It is smaller than CLOUD CASTLE, but otherwise these two are "peas in a pod." It holds up better in the hot sun. This Fay seedling No. 51-21 was just one of three very fine seedlings from him this year. Dr. Grant's FAIR SKY, another light blue, had the best branching of any iris in the garden, with the exception of SALLY ANN, a yellow seedling from Mr. Kenneth Smith. But none of these newcomers can push good old SHINING WATERS from its rightful place on the stage when it comes to the matter of coloring, branching and general average of good stalks. Mrs. Herbert, a member of the A. I. S. who has an especialy fine iris garden here in Roanoke, had a large clump of it in her garden and out of about 25 bloom stalks, at least 20 were of exhibition quality.

Every year the hybridizers show up with iris seedlings in some one color class. This year it was copper-brown, all sorts of shapes and sizes and shades of metallic brown, looking in some cases as though they were cut out of copper, but alas! not enough substance in the whole lot of them to do for one iris. HINDU QUEEN, CASA MORENA, ARAB, NIGHTINGALE, Kleinsorge No. 317 (which I understand will be named), PRETTY PENNY and Wills No. 11-43 are just a few of them. CASA MORENA is the best of the lot in shape, color and substance, but in the case of substance it's somewhat deficient. Perhaps the chromosome or gene that carries this lovely color also carries the poor substance. Maybe the duller colored iris compen-

sate by having the best substance. For example, Kleinsorge No. 317 and No. 317-A were blooming near each other. No. 317 was a lovely copper color with the metallic sheen that is so bright in the sun; No. 317-A was a duller brown, but it had enough substance not only for itself but with a bit to spare for its sister seedling, which obviously needed it. All these new coppers are lovely for flower arrangements.

There is another group with some pink in them but at the same time with brown predominant. A really unique shade is seen in a new one from Mr. Kleinsorge. Called OREGON TRAIL it is a very vivid brown with bright pinkish brown spots near the haft that attract attention right away. I think it one of the most appealing of these darker colors and looks as though it were cut out of suede.

There were several new whites this year, but they were not outstanding. KATHARINE FAY, Caldwell No. 73-42, and Mr. Beck's new white (I forget the number) were growing near each other. KATHARINE FAY is whiter and larger but the Caldwell seedling is a better shaped iris. The Beck white is very good with nice flaring falls. All three are well worth having. Hall No. 41-21 is a hefty cold white that is very floriferous but needs taller stalks. Graves No. 38-87C turned in a good performance. It has only fair branching, but I like it better than FRANCONIA. Both are overshadowed by SNOW VELVET, which can be recommended for consistent bloom and a good average performance. PRISCILLA was even better than usual this year, which is saying a lot. If I ever see an iris that I think deserves a rating of 91, it won't have to be much better than PRISCILLA. Another good white is a seedling of Mr. Fishburn's. It has now bloomed for three years and always gives a good account of itself. This iris has a lovely shape, nice branching, is very floriferous, has pretty good texture and substance, and really should be introduced. Two little whites that are newcomers and may be classed as intermediates should not be overlooked, especially by those interested in iris for flower arrangements. SPRING ARIA and WHITE SAMITE are both cold but very pretty whites. SPRING ARIA is the better, perhaps, but one could do with both of them. Generally speaking, the tops in the whites, as it looks from here, are still PRISCILLA, PATRICIA, SNOW FLURRY, and GUDRUN.

In yellows—and how they come!—GOLD MEDAL, a very large bright yellow, drew lots of attention. It is an early bloomer and so had the field to itself. To me, it suggests FORT KNOX, which must

be one of the comet iris for it hasn't shown up since the first year. Guess we will have to class it with GOLDEN SPIKE and SPUN GOLD as "seldom-bloomers." So I hope that GOLD MEDAL will not prove to be in this class. It tends to flop just a little, as does GOLDEN EAGLE, another of the larger yellows. It seems that the smaller iris like DIXIE SUNSHINE, CAREFREE, and BERKELEY GOLD compensate for their smaller size by having substance that is more impervious to the heat and wind. Kleinsorge No. 301 is a very bright yellow that on a one-year plant had rather a short bloom stalk. Mr. McKee, too, had a nice bright yellow which has been named FRANCELIA. It was rather large and had a nice carriage. Two or three new yellows from various hybridizers are obviously GOLDEN HIND seedlings which retain the parents' lovely rich coloring, but are improvements upon it. STARWOOD, a McKee seedling, and JASMINE are three that are quite good and very rich in coloring although not so spectacular as their larger brothers and sisters. For intensity of color ELLA CALLIS is still out in front as far as the chrome yellows go. It has done well here for three years now, and the color grows on one. OLA KALA is the best yellow that I have ever seen for all-around good qualities. MING YELLOW is a good second. LATE SUN is also a good performer.

In the orange yellows, two, I think, have everything their own way as far as color goes. PRINCE OF ORANGE and De Forest No. 1-40 are the most vivid iris in yellow in the garden. If this seedling can keep up with the "PRINCE" in floriferousness, it will be the better of the two because it has better branching. But one would be lucky to have them both.

In the light yellows or creams, very popular with all visitors, Mr. Essig has a whole series, all of which are good. GOLDEN MADONNA, a great favorite, is the best known. MISSION MADONNA, JADE MADONNA, EASTER GOLD, EVENING PRIMROSE, and Essig No. 1196F are all very attractive and vary only in tint. They are all of the substance and texture of MARQUITA. JADE MADONNA had a coppery flush on the falls something like that of MOONBEAM. EVENING SNOW has a velvety texture to the falls that one senses in SNOW VELVET or in NIGHTFALL. In the green yellows, MOONLIGHT MADONNA is still tops. Two other seedlings of Mr. Sass in this same class were taller although their branching was not quite so good.

In the light of what I saw this season, we don't seem any nearer to the real red than we were last year. Two new iris give great

promise of being quite fine in the group of reds over which THE RED DOUGLAS holds sway. RESOLUTE is very like THE RED DOUGLAS with practically the same color and shape. In fact, someone said that RESOLUTE resembles THE RED DOUGLAS as it would appear if it did not pinch its falls. On a one-year plant it was rather short; however, if it grows taller on an established plant, it will compete with RED VALOR, which is still the best performer of the lot, and the tallest. RANGER, a late bloomer, is a darker one in the same color class with the same shape but taller than RESOLUTE. I like this iris but it will not be known widely because it blooms late. REDWARD still continues to be the reddest iris I know, and WILDFIRE next. Both are small and on short spikes. FLAMELY is a very pretty iris with more brown in it than is found in REDWARD. I like both of these better than I do ACTION FRONT. Two other iris which I suppose rightly belong in the plicata class I am placing here. They are red plicatas. I would certainly plant them with the reds if I had them. They are ROYAL SCOTT and FIRECRACKER. Dr. Kirk, a rose enthusiast, spoke of them as "dappled reds." From a distance they seem to have the appearance of red iris. ROYAL SCOTT is the better and the brighter, but I think these are both good color breaks.

In the plicata class—and I mean the old orthodox plicatas (of white or cream with the "button hole stitch" and sandying)—one very striking new one that I like next to BLUE SHIMMER appeared. MAGIC CARPET has a light cream background with markings of red brown. It is not as sanded as GYPSY BARON, and I believe is going to prove a favorite. But BLUE SHIMMER is still way out front for sheer loveliness. It was taller this year and has increased unbelievably. It has to be on an established plant to be tall, I think, because I had a short bloom stalk on a one-year plant not nearly so tall as it was in Mr. Fishburn's garden.

In the newer style of plicatas, there were several with the heavily sanded standards of yellow and the lighter cream falls with the brownish markings. TIFFANJA, CHIPPEWA, and a numbered seedling from Mr. Mitchell were in this group. ROSE TOP did well this year again. It has the rose instead of the yellow standards. MOONLIT SEA could not decide whether to be a plicata or a bitone. ALZA HOLA has blue where the white used to be in the old-style plicata and yellow in place of the former blue markings, so one could put it in a new class of plicatas. ARIANE is seldom heard of and hasn't had its well-earned share of praise. It is a good performer year

after year. It has good substance, a quality of most of Mr. Cayeux's iris, and is more sanded than *ATHALA*. Mr. Hall's pink *plicata* still gets a lot of deserved attention. Nearly all the visitors say it is one of the pinkest iris in the garden.

This brings us to the pink blends. The usual large number of new varieties in this class attest the fact that most hybridizers are still on the trail of that most illusive of flowers, the one we are all awaiting so eagerly—the real bright pink that can stand up and look a Mary Wallace rose or a Dame Edith Helen in the face when it comes to color. Meanwhile, as a sort of by-product they are getting a lot of pink blends that are very good. The range of tints and shades is wide and the general standard of good qualities is as high in this class as in any other; certainly the class contains the largest number of new varieties. *THREE OAKS* I saw for the first time. It is a dead ringer for *De Forest* No. 37-42. Both could do with better branching. *Sass* No. 40-400 is one of the loveliest blends. It is what I imagined *PRAIRIE SUNSET* was going to look like after reading the descriptions of it in the *BULLETIN* before I ever saw it. Perhaps a tendency of the standards to flop after a rain may have kept it from getting introduced. *REMEMBRANCE* was good again this year and seems to be going places in the eyes of the public. *INSPIRATION* showed up well this year, also. On a one-year plant in Mrs. Herbert's garden it was admired by the visitors. It is one of the darker pink blends, as is *THREE OAKS*. Sometimes a seedling must get a great kick out of putting on a better show than its sister seedlings that were chosen to be named while it was passed up. This year *MAJENICA*, *LANCASTER*, and *Cook* No. 65-39 were blooming in the same bed and the numbered seedling was by far the most outstanding of the three, which is saying a lot for any iris because *MAJENICA* is one of the best of the pink blends. *LANCASTER*, too, performs well here. *MELANIE* and *MULBERRY ROSE* were again quite fine this time. *CALIFORNIA PEACH* and *LULLABY* still get their full measure of praise in spite of newcomers in this field.

Mr. Hall has a lovely tannish pink which may belong in the group with the yellows or tans. *Hall* No. 42-01 is a large, fine iris that can stand up in all sorts of weather and look fresh. The bloom is shaped rather like *LULLABY*, and it was one of the best iris in the whole group where Mr. Hall's varieties were blooming. It was way ahead of *NIGHTINGALE* in performance, although the color was not so interesting.

MISTY ROSE is still another type of blend, rather in the class with ANGELUS. It should be fine in a mass. I had never paid much attention to ANGELUS until I saw it in a large clump in Mrs. J. B. Fishburn's garden. It was simply magnificent, suggesting an immense opal in the afternoon sun.

Nothing new turned up in the "Flamingo" or "Seashell" pinks. OVERTURE, No. T.Q. 70, No. V20, and FLORA ZENOR are still tops in this class. LADY LOVE and a seedling of Mr. Hall's are carbon copies of MELITZA. All these are still small. I am eagerly awaiting the next BULLETIN to see if any large ones appeared in the seedling patches anywhere this season.

This was certainly not a variegata year—no new ones in the regular class, that is, the bright yellow standards with other colored falls. There were three new ones in the off-shades. Two were very much alike. In fact, if I saw one in a garden without a name I would not be able to decide immediately which it was. SEA OTTER from Mr. Hall and BLACK AND GOLD from Mr. Kleinsorge are dead ringers for each other. Both have dull black falls and dark orange standards. Both are late bloomers. SEA OTTER is the taller of the two. The third, a seedling of Mr. Sass', has standards like PRAIRIE SUNSET and falls like FLAMELY. The branching is good and the substance is fine. In fact, there isn't really anything I can say against it. But somehow I think that Dizzy's description of Gladstone is applicable: "It has no redeeming faults." But where are all the variegata seedlings that the hybridizers must be getting? We can stand a few good ones in this class. CITY OF LINCOLN has never been a good performer here. Mr. Hall's seedling does very well, but please somebody find us a pretty one with the shape of GUDRUN or GLORIOLE, with the standards bright yellow and the falls a bright velvety blue like the old DECENNIAL, but larger.

In the amoena group, as usual for the last five or six years, there is only one representative. Maybe after the hybridizers get the pink and red problem settled, they will start on this much neglected class. In the near amoenas LOUISE BLAKE is rather close to AMIGO. But it is taller and has *pollen*! LOTHIARIO and these two will have to do until we can get better ones.

Usually after hearing an iris greatly praised in advance, I am disappointed when I do get to see it. But ELMOHR was a very pleasant surprise. It deserves all the praise it has received. It shows its onco blood even more than does ORMOHR. The color is a

reddish purple where ORMOHR's color is blue purple. OYEZ, the exception to the rule of all iris doing well this year, did not bloom for any of us here in Roanoke, and how I missed it! These oncos can't be counted on too much in our climate. ENCHANTED and SOME LOVE, too, were A. W. O. L., but I had counted on OYEZ to be here. Two new ones were present in this class. AZIM is a curious dark purple with white flecks all through it. White No. 14-E-42-8 is a lavender with falls veined red and white. It bunches badly. Both are just curiosities.

The dark purple and blues had no newcomers. CAPTAIN WELLS, VATICAN PURPLE, BLACK BANNER and INDIANA NIGHT were here last year. These are all fairly good performers. VATICAN PURPLE is the only tall one of the lot. BLACK BANNER, a fine blue-black purple, is a taller and better SABLE. It is a two-toned iris with velvet falls, while VATICAN PURPLE is a red-purple self very like the old FAVORI in shape and type.

A backward look at the season makes one decide that it was indeed a satisfactory one. The most outstanding of the newcomers were CHIVALRY, CLOUD CASTLE, De Forest No. 40-1, Hall No. 42-01, ELMOHR, OREGON TRAIL, and CASA MORENA.

One of the privileges of visiting a large garden like Mr. Fishburn's is the opportunity it affords to meet so many of the A. I. S. members whose articles one has read in the BULLETINS or whose iris one has grown or admired. This season on one afternoon there were seven Accredited Judges and several other members in the garden at one time. Among them were Mr. Shull, whose MORNING SPLENDOR and TROPIC SEAS were the first iris I ever bought; Mr. Watkins, whom I had never met but whom we all feel we know just as we feel we know Edward R. Murrow and Mr. Dolman; Mr. Dolman's very excellent article on what constitutes a good iris is one of the most valuable editorials on the subject I know of and certainly does make us think before we rate an iris at 90 or more. Several other A. I. S. members were there, including Mr. and Mrs. Palmer from Arlington. Mr. Palmer tells me that he is getting some interesting colors in his seedlings from a cross of JUBILEE and LA LORRAINE. We had a regular "jam session" on the subject of fertilizers. We all deplored the fact that cow manure does cause root rot, because we agreed that for such gross feeders as iris the bacteria that are found in such massive quantities in cow manure are needed. In the process of their own metabolism the bacteria change the insoluble food sub-

stances in the soil into soluble forms so that the plants can take them up. How to get these bacteria without the ones that cause root rot is a problem we all admitted not being able to solve. Last year, and this year also to some extent, I have had stalks with seed pods well developed that begin to rot up in the stalk with no signs of borers. The stalk gets mushy and falls over and thus many a promising set is lost. All of us agreed that the iris family trees published in the BULLETINS make a most interesting feature and are valuable to the amateur hybridizer. Some of us agreed, too, with Mr. Bedell who wrote in one of the BULLETINS that a list of blood lines to be avoided also would be helpful to the beginner in the hybridizing field.

CHROMOSOME NUMBERS OF TALL BEARDED IRIS

L. F. RANDOLPH¹

■ THE FUNDAMENTAL principles of heredity cannot be applied intelligently in the improvement of cultivated plants without an understanding of chromosome and gene relationships. The Mendelian laws were first established in experiments with diploid organisms. But it is now known that they apply equally well, but in a very different manner, to triploids, tetraploids and other polyploids, which have either three, four, or more sets of chromosomes rather than the two sets present in ordinary diploids.

In recent years attempts have been made to interpret the inheritance of flower color and other characters of iris on the basis of diploid inheritance. However, Simonet and others have shown that many varieties of tall bearded iris are tetraploid, and among tetraploids segregation and recombination of characters occur with frequencies that are very different from those which prevail in diploids. Wherever polyploidy is prevalent, as it is in the genus *Iris*, a knowledge of the chromosome number of individual varieties is prerequisite to any scientific interpretation of hereditary behavior.

The chromosomes and their constituent genes are the physical basis of heredity. It is the chromosomes and not the characters of the individual as such that are transmitted from generation to

¹Cooperative investigation of the Department of Botany, New York State College of Agriculture, Cornell University, and the Division of Cereal Crops and Diseases, Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, U. S. Department of Agriculture.

generation. The hereditary potentialities of the individual are predetermined by the kind and number of genes and chromosomes which it acquires at the time of fertilization. Likewise, the combination of chromosomes and genes contributed by the individual to its functional germ cells determines the hereditary potentialities which are transmitted to the next generation. The individuality of the chromosomes and their persistence through succeeding generations provide for the continuity of the germ plasm that is essential to the functioning of Mendelian inheritance.

Determinations of chromosome number ordinarily are made either from dividing cells in actively growing root tips, or in the tissue of the anther from which the pollen grains are formed. In the present study the chromosome counts were made exclusively from root tips preserved on card mounts (5), fixed in the CRAF fluid (4), and stained with crystal violet. With this technique the iris chromosomes are clearly delimited at the mid-phase of their division cycle as rod-shaped bodies ranging in length from approximately 5 to 15 microns (0.000195 to 0.000585 inch).

The accompanying figures were drawn with the aid of a camera lucida at a magnification of 3200 diameters and were reduced approximately one-half in reproduction (the scale equals 10 microns or 0.00039 inch). The relative lengths of the chromosomes are not accurately represented in these figures since many of them were curved in various directions in the figures and the drawings merely represent projections of the outline of the chromosomes in one plane.

The appended list of somatic chromosome numbers in garden varieties of tall bearded pogoniris includes the counts published by Longley (1) in 1928, those published by Simonet (6) from 1928 to 1934 and previously published counts of Randolph (3), together with additional unpublished counts. It includes all of the recognized varieties of known chromosome number that are recorded in the *Alphabetical Iris Check List* of the American Iris Society, compiled and edited by Mrs. E. A. S. Peckham. Species and collected varieties of tall bearded iris are not included.

In this list the name of the variety is followed by the name of the originator or introducer and the year in which the variety was named or introduced, these data having been procured from the 1939 edition of the *Check List* or supplemental lists published subsequently by the American Iris Society. The letters placed at the

left of the column of chromosome numbers designate the varieties counted by Longley (L), Simonet (S) and the published counts of Randolph (R).²

Counts that could not be determined exactly with the material at hand were designated with a $\pm$ sign. In rare instances deviations of one or more chromosomes from the typical number were noted in the same or different root tips of a given variety. These are listed along with the typical number, which is placed in alignment with the counts of the other varieties.

A certain number of varieties are included in this list that were classed as intermediate bearded (IB) iris in the *Check List* because they were intermediate in height between the dwarf and the tall bearded iris. Since these varieties resemble the typical tall bearded sorts in having chromosome numbers that are multiples, or essentially multiples, of the base number 12, they are here included with them. Such varieties can be readily distinguished cytologically from the true intermediate bearded iris that have 43 or 44 chromosomes and originated as hybrids of dwarf iris with 40 chromosomes and tall bearded varieties with 48, or approximately 48, chromosomes. Involved by this revised listing are such varieties as HER MAJESTY, MRS. HORACE DARWIN, CORDELIA, ALLIES, CAPRICE and about a dozen others. Also included in the list are certain varieties that originated from the pogocyclus hybrid WILLIAM MOHR, and were subsequently backcrossed either once or twice to tetraploid tall bearded varieties. The first generation back crosses, such as ORMOHR, ELMOHR, MOHRMEAD and SOQUEL, typically have 46 chromosomes. Obviously, this number resulted from the functioning of unreduced female gametes of WILLIAM MOHR with 22 chromosomes and normally reduced 24-chromosome male gametes of tetraploid tall bearded varieties. Since these hybrids can be crossed fairly readily with the true tall bearded tetraploids, it is possible that they may contribute interesting new characters to this group of iris from the oncocyclus section of the genus.

Care was exercised to insure the proper identification of the varieties that were examined cytologically. Many of the specimens were obtained directly from the originator in an effort to minimize the possibility of error. The plants were grown for observation in experimental plots. The flowering specimens were compared with

²Variety designations in the published lists of Longley (1) and Simonet (6) were altered where necessary to agree with those approved by the *Check List*.

the varietal descriptions in the *Alphabetical Iris Check List*, and it is believed that most, if not all, of the recorded varieties were correctly named. The current list contains one correction: a specimen of the variety KING TUT obtained from the originator, Mr. Hans Sass, was found to have 48 chromosomes; an earlier report of 36 for this variety was based on a misnamed specimen growing in the Cornell test garden. The remarkably good agreement among the counts of numerous varieties that have been made independently by different workers is indicative of the correctness of the identification of these varieties.

The 420 varieties contained in the list are, with respect to their chromosome number, an unselected group that is representative of the better varieties of iris in existence during the past 25 years. The varieties examined by Longley, of which 31 are listed, were from the collection of Harvard College and included chiefly older European varieties. The 82 varieties from which counts were procured by Simonet were obtained chiefly from European sources, notably from the collections of Vilmorin and other hybridizers in France and England. These varieties of Simonet included, in addition to a number of varieties of Lemon and Salter that are now approximately 100 years old, chiefly European varieties introduced from 1900 to 1930. My own counts included a limited number of the older varieties, some of which were also counted by Longley and Simonet; but the majority of my 334 counts were of American and European varieties introduced in recent years.

The most important conclusion of primary interest to iris breeders that may be drawn from these data on chromosome numbers is that most of the garden varieties of tall bearded iris introduced in recent years are tetraploid and have either 48 or approximately 48 chromosomes. The older varieties introduced from 1840 to about 1910 were almost exclusively 24-chromosome diploids. Tetraploid varieties began to appear soon after the introduction into Europe near the close of the last century of the Asiatic and Eastern Mediterranean species and collected varieties of tetraploid iris. During the past 25 or 30 years the trend to tetraploidy has been unmistakable and very rapid.

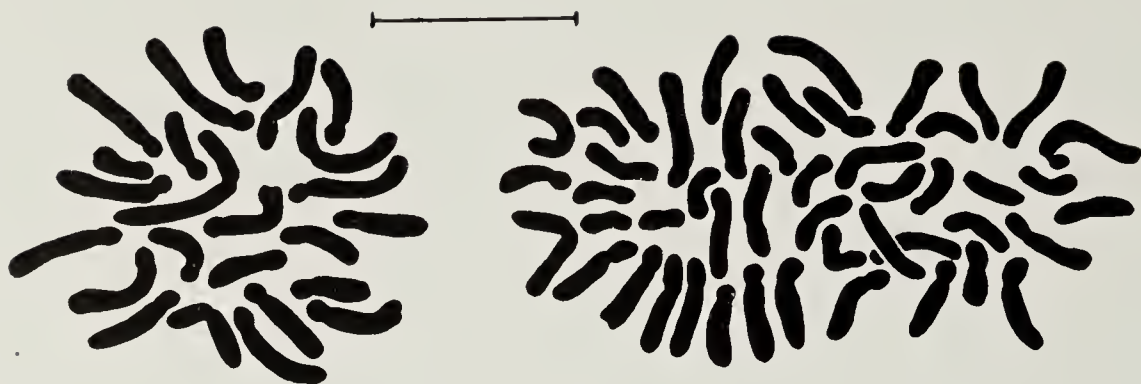
Confirmation of the fact that most of the better iris introduced in recent years are tetraploid was obtained from the examination of the varieties recorded in the unofficial symposium lists of 1942 and 1943, compiled by Kenneth D. Smith (7, 8). The securing of counts

from a large proportion of these varieties was made possible by the very helpful cooperation of originators of the varieties included in these lists. The unofficial symposium lists of 1942 and 1943 contained the names of 121 different varieties. These varieties received the most votes from judges of the American Iris Society who were asked to name the 50 best iris of that particular season, exclusive of novelties. The chromosome number of 109 of these varieties was determined. Of this number 108 were tetraploids and one was triploid. No diploids were detected in this selected group of iris varieties.

It is not within the scope of the present paper to discuss the manner in which the transition from diploidy to tetraploidy was accomplished, or possible reasons for the popularity of the tetraploid varieties. It is apparent from a cursory examination of recorded parentages that most of the earlier tetraploids which became the progenitors of many of the better modern tetraploid varieties originated from the diploid varieties, either directly through the functioning of unreduced gametes of the diploid in combination with normally reduced gametes of tetraploids, or indirectly from triploids. The dwarf bearded iris have also contributed to the diversity of existing tetraploids, and there has been some infusion of germplasm from other sections of the genus, as for example the *pogocyclus* iris.

There are unquestionably many excellent diploid varieties of tall bearded iris in existence at the present time, and it is possible that their popularity may increase rather than decrease. Certainly, they should not be neglected by hybridizers interested in the further improvement of the tall bearded garden iris.

Most crosses involving diploid and tetraploid varieties seldom set seed. Triploids are inferior as parent stocks due to the prevalence of unbalanced chromosomal types among their progeny, and the pentaploids have yet to prove their value in iris breeding. In hybridizing iris many failures can be avoided by limiting crosses either to diploid or tetraploid varieties. However, outstanding varieties have been obtained from occasional seeds produced by intercrossing diploids and tetraploids. Unfortunately, there is no simple criterion for distinguishing diploid, triploid and tetraploid iris. Although the tetraploids as a group have larger flowers of firmer texture, sturdier flower stalks with better branching and a more robust growth habit than the diploid varieties, there are



The 24 chromosomes of the diploid variety Pink Ruffles and the 48 chromosomes of the tetraploid variety China Maid, magnified by approximately 1600.

frequent exceptions. It is reasonably safe to assume that varieties which cross readily and produce well-filled capsules of good seed have the same chromosome number; but the converse is not necessarily true because of the presence of genic as well as chromosomal incompatibility, especially among tetraploid varieties. Cytological examination is necessary to determine definitely the chromosomal constitution of a given variety of iris.

The evidence from the chromosome counts that have been made indicates that most of the better iris varieties introduced in recent years are tetraploids, but diploid and triploid sorts are prevalent. A knowledge of chromosome numbers and the principles of both diploid and tetraploid inheritance are essential to any scientific analysis of results obtained in the breeding of tall bearded iris.

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Chromosome Numbers, Tall Bearded Iris

AIRY DREAM, Sturt., 1929	24	CAPITOLA, Reinelt, 1940	42, 43
AKSARBEN, J. Sass, 1923	36	CAPRICE, Wilm., 1898.....	L, R 24
ALCAZAR, Vilm., 1910	S, R 48	CAPTAIN WELLS, P. Cook, 1941	48
ALDEBARAN, Vilm., 1926	S 24	CARDINAL, Bliss, 1919	49
ALGOL, Vilm., 1928	S 48	CAROLINE BURR, K. Smith, 1939	50
ALHAMBRA, Vilm., 1926	S 50	CASTALIA, Wmsn., 1933	36
ALICE HARDING, Cay., 1933	±48	CATERINA, Fos., 1909	48
ALINE, Stern, 1933.....	47	CAYLUS, Vilm., 1926	S 52
ALLIÉS, Vilm., 1920	S 35	CELLOPHANE, Wash., 1936.....	49
AL-LU-WE, H. P. Sass, 1932	49	CHALICE, Sturt., 1934	24
ALONZO, Sal. bef., 1858	S 24	CHARTIER, C. Hall, 1925	24
ALTA CALIFORNIA, Mohr-Mit., 1931	48	CHASSEUR, Vilm., 1920	S 24
ALTAIR, Vilm., 1928	S 48	CHEERIO, Ayres, 1934	49
AMABILIS, Lémon, 1840	L 24	CHINA MAID, Millik., 1936	48
AMBASSADEUR, Vilm., 1920	S, R 50	CHRISTABEL, Lap., 1936	49
AMBER, Dykes, 1924	24	CITY OF LINCOLN, H. P. Sass, 1936	48
AMBIGU, Vilm., 1916	S 25	CLARA NOYES, H. P. Sass, 1930	24
AMENTI, H. P. Sass, 1936	49	CLARIBEL, J. Sass, 1936	48
AMIGO, Wmsn., 1934	49	CLIO, Verd., 1863	S 24
AMITOLA, H. P. Sass, 1936	48	CLUNY, Vilm., 1920	S 24
ANDROMEDE, Vilm., 1926	S 36	COLOSSUS, H. P. Sass, 1931	48
ANGELUS, Egel., 1937	49	CONQUISTADOR, Mohr, 1923	49
ANN PAGE, Hort, 1919	48	CONSTANCE MEYER, R. H. Meyer bef.,	
APHRODITE, Dykes, 1922	24	1938	49
ARCHEVEQUE, Vilm., 1911	S 24	CONTEMPLATION, Reuthe, 1927	±48
ARCTIC, Klein., 1940	48	COPPER LUSTRE, Kirk., 1934	49
ARCTURUS, Vilm., 1927	S 24	COPPER ROSE, P. Cook, 1941	48
ARGENTINA, Mohr, 1923	50	CORALIE, Ayres, 1932	±48
ARGONAUT, Bliss, 1920	24	CORDELIA, Park., 1873	S, R 25
ASPASIE, Van T., 1907	S 24	CORONATION, Moore, 1927	36
ASTARTÉ, Sal. bef., 1859	S 24	CORRIDA, M.L., 1914	24
AT DAWNING, Kirk., 1935	49	COURTISANE, Cay., 1934	±48
ATROPURPUREA, Ware, 1880	L 24	CREOLE BELLE, Nic., 1934	47
AUBANEL, Cay., 1935	49	CROWN JEWEL, Nic., 1934	24
AUGUSTISSIMA, Lémon, 1840	S 24	CRYSTAL BEAUTY, J. Sass, 1935	36
AUREA, Jacques, 1830	24	DALILA, Den., 1914	24
AUTUMN KING, H. P. Sass, 1924	46	DALMATICA, Coll., cult. bef. 1600	L 24
AVONDALE, H. P. Sass, 1934	50	DAMERINE, Gage, 1939	49
AZTEC COPPER, Klein., 1939	51, 52	DAUNTLESS, Con., 1929	48
BALDWIN, H. P. Sass, 1927	47	DAYBREAK, Klein., 1941	48
BALLERINE, Vilm., 1920	S, R 36	DEEP VELVET, Salb., 1939	48
BALLET GIRL, H. P. Sass-Schreiner,		DEJAZET, Vilm., 1914	S 50
1935	24	DELICATA, Park., 1874.....	L 24
BALMUNG, H. P. Sass, 1939	48	DÉPUTÉ NOMBLOT, Cay., 1929	48
BAXTER, Baxter, 1884	L 24	DESERT GOLD, Kirk., 1929	50
BEAU SABREUR, Wmsn., 1930	50	DIANE, Vilm., 1902	S 48
BELLATRIX, Vilm., 1927	S 24	DIRECTEUR PINELLE, Cay., 1932	50
BLACK PRINCE, Per., 1900	S, R 26	DOGROSE, Insole, 1930.....	24
BLACK VALOR, Nic., 1938	46	DOMINION, Bliss, 1917	S, R 50
BLACK WINGS, Kirk., 1930	48	DOROTHY DIETZ, Wmsn., 1929	50
BLUE BANNER, Kirk., 1929	24	DRAPEAU, Vilm., 1914.....	S 48
BLUE DANUBE, H. Meyer, 1932	48	DR. CHARLES E. MAYO, Fry., 1924	24
BLUE DIAMOND, Nic., 1938	48	DR. CHOBAUT, Den., 1925	63
BLUE SHIMMER, J. Sass, 1941.....	48	DUBROVNIK, Wmsn., 1938	50
BLUE SPIRE, Millik., 1938	48	DUQUESNE, Hall, 1923.....	50
BLUE ZENITH, Whiting, 1941	47	EASTER MORN, Essig, 1931	49
BRUNHILDE, Salb., 1934	48	E. B. WILLIAMSON, P. Cook, 1937	48
BRUNO, Bliss, 1922	48	ECLADOR, Cay., 1932	35
BUTTERCUP LANE, D. Hall, 1939	48	EDWARD LAPHAM, Lap., 1940	48
CALIFORNIA GOLD, Mohr-Mit., 1933	48	E. H. JENKINS, Bliss, 1919.....	36
CALYPSO, Krel., 1913	L, S 24	EL CAPITAN, Mohr-Mit., 1926.....	48
CANARY, Cap., 1901	S 24	ELDORADO, Vilm., 1910	S 24
CANARY BIRD, Per., 1903	L 24	ELIZABETH EGELBERG, Egel., 1929	48
CANDLELIGHT, And., 1926	48	ELMOHR, Loomis-Long, 1942	46

ELOISE LAPHAM, Lap., 1932	24	KNYSNA, Bliss, 1917.....	24
ELSA SASS, H. P. Sass, 1939	50	LABOR, Cay., 1926.....	24
EL TOVAR, H. P. Sass, 1933	49	LADY NAOMI, Fay, 1941.....	48
EROS, Mead-Riedel, 1934	24	LADY PARAMOUNT, C. G. White, 1934....	48
ESPLENDIDO, Mohr, 1924	48	LANCASTER, P. Cook, 1940.....	49
ETHEL PECKHAM, Wmsn., 1932	48	LA NEIGE, Verd., 1912.....	24
ETHELWYN DUBUAR, Lap., 1933	24	LATE SUN, De Forest, 1939.....	48
ETOILE DU MATIN, Vilm., 1926	S 24	LE CORREGE, Vilm., 1927.....	S 48
EVELYN BENSON, Mur., 1931	24	LE KHEDIVE, Weller, 1927.....	S 24
EXCLUSIVE, Grant, 1935	50	LENT A. WILLIAMSON, Wmsn., 1918..	S 50
FAIR ELAINE, Mit., 1938	48	LÉONARD DE VINCI, Vilm., 1926.....	S 49
FAIRY, Ken., 1905.....	24	LÉONIDAS, Barr, 1901.....	L 24
FAR WEST, Klein., 1936	48	LE POUSSIN, Vilm., 1926.....	S 24
FIRE GOD, Nic., 1929	48	LE TITIEN VILMORIN, Vilm., 1928.....	S 48
FLAMMENSCHWERT, G. & K., 1920	24	LEVERRIER, Den., 1917.....	S 36
FLORA ZENOR, J. Sass, 1941	48	LIGHTHOUSE, Salb., 1936.....	50, 51
FLORENTINE, Cay., 1937	49	L. MERTON GAGE, Lap., 1942.....	48
FRANCONIA, Graves, 1941	48	LODESTAR, Hall, 1925.....	25
FRANK ADAMS, Lap., 1937	47	LORD OF JUNE, Yeld, 1911.....	S, R 48
FRIEDA MOHR, Mohr-Mit., 1926	36	LORELEY, G. & K. abt., 1909.....	S 24
FRIGATE, Peck., 1932	±48	LOS ANGELES, Mohr-Mit., 1927.....	49
FRO, G. & K., 1909.....	24	LOUTE, Vilm., 1897.....	S 35
GAJUS, G. & K., 1906	24	LOUVOIS, Cay., 1936.....	48
GARDEN FLAME, H. P. Sass, 1941	48	LUCERO, Nic., 1932.....	50
GARDEN MAGIC, Grinter, 1936	49	LUCREZIA BORI, Schreiner, 1935.....	±48
GAY HUSSAR, Wmsn., 1929	24	MADAME LOUIS AUREAU, Cay., 1934.....	49
GEO. J. TRIBOLET, Wmsn., 1926.....	46, 48	MAGNIFICA, Vilm., 1919.....	S, R 60
GEORGE YELD, Per., 1923	24	MAISIE LOWE, Gibson, 1930.....	48
GÉRICAUT, Vilm., 1927	S 50	MAJESTIC, Bliss, 1923.....	48
GERMAINE PERTHUIS, Mil., 1924	47	MALVINA, Farr, 1912.....	L 24
GIRALDA, H. P. Sass, 1939	24	MA MIE, Cay., 1906.....	24
GLEAM, Nic., 1929	24	MANDRALISCAE, Tod., 1861.....	L 24
GLEN ELLEN, Con., 1939	48	M. A. PORTER, Lap., 1931.....	50, 51
GLORIOLE, Gage, 1933	48	MARIAN LAPHAM, Lap., 1932.....	24
GOLDEN EAGLE, D. Hall, 1939	48	MARIE LOUISE CAILLAT, Hudson, 1930..	49
GOLDEN FLARE, Insole, 1931.....	24	MARQUITA, Cay., 1931.....	47
GOLDEN GLOW, Glutzbeck, 1939	49	MARSOVIN, Vilm., 1922.....	S 24
GOLDEN HIND, Chad., 1934	48	MARY BARNETT, Comb., 1926.....	24
GOLDEN MADONNA, Essig, 1936	48	MARY E. NICHOLLS, Nic., 1939.....	48
GOLDEN MAJESTY, Salb., 1938	48	MARY GEDDES, Stahl-Wash., 1931.....	49
GOLDEN SPIKE, Whiting, 1939	49	MATTERHORN, J. Sass, 1938.....	49
GOLDEN TREASURE, R. Schreiner, 1936	48	MATULA, H. P. Sass, 1939.....	48
GOLD IMPERIAL, Sturt., 1924	24	MAUNA LOA, Berry, 1926.....	48
GOLDWING, Nic., 1934	24	MAY DAY, D. Hall, 1939.....	48
GRACE LAPHAM, Lap., 1937	24	MELITZA, Nes., 1939.....	47
GRACE MOHR, Jory, 1935	46, 47, 48	MEPHISTOPHELES, Dutch, 1889.....	L 24
GRACE STURTEVANT, Bliss, 1926	48	MICHEL-ANGE, Vilm., 1928.....	S 49
GREAT LAKES, Cousins, 1938	48	MIDGARD, H. P. Sass, 1926.....	24
GRENADIER VILMORIN, Vilm., 1925	S 47	MIDWEST, H. P. Sass, 1923.....	24
GRÉVIN, Vilm., 1920	S 24	MIDWEST GEM, H. P. Sass, 1937.....	51
GUDRUN, K. Dykes, 1930	48	MING YELLOW, Glutzbeck, 1938.....	48
HAPPY DAYS, Mit., 1934	48	MIRANDA, Hort, 1919.....	24
HECTOR, Lémon, 1840	24	MIRIAM, Vilm., 1904.....	S 36
HELIOS, Cay., 1938	49	MISS CALIFORNIA, Salb., 1937.....	49
HER MAJESTY, Per., 1903.....	L, R 24	MISSOURI, Grinter, 1933.....	49
HILDA, Bliss, 1920	24	MISS WILLMOTT, Fos., 1910.....	51
HUSSARD, Vilm., 1924	S, R 24	MILIE. SCHWARTZ, Den., 1916.....	S 36
ICY BLUE, National, 1940	48	MME. CHEREAU, Lémon, 1884.....	L, R 24
IMPERATOR, Cay., 1922.....	24	MODISTE, D. Hall, 1938.....	48
IMPERIAL BLUSH, H. P. Sass, 1932.....	24	MOHRMEAD, P. Cook.....	46
IMPERIAL KING, Cornell, 1927.....	36	MOLIERE, Vilm., 1920.....	S 47
INDIANA NIGHT, P. Cook, 1942.....	48	MONADNOCK, Salb., 1937.....	50
INDIAN HILLS, Grant, 1935.....	48	MONSIGNOR, Vilm., 1907.....	S 24
IRIS KING, G. & K., 1907.....	S 25	MONTEREY, Mohr-Mit., 1929.....	48
ISOLINE, Vilm., 1904.....	S, R 36	MOONLIGHT, Dykes, 1923.....	47
JACQUESIANA, Lémon, 1840.....	L, S 24	MORNING SPLENDOR, Shull, 1923.....	48
JASMANIA, Ayres, 1935.....	48	MORPHÉE, Lémon, 1840.....	L 24
JEAN CAYEUX, Cay., 1931.....	48	MOUNT CLOUD, Millik., 1936.....	48
JEANNE D'ARC, Verd., 1907.....	24	MOUNT WASHINGTON, Essig, 1937.....	48
JEB STEWART, Wash., 1932.....	48	MRS. GEORGE DARWIN, Fos., 1895.....	L 24
JOANNA, Stern, 1936.....	±47	MRS. HORACE DARWIN, Fos., 1888.....	L 24
JOYCETTE, J. Sass, 1932.....	48	MRS. MARION CRAN, Per., 1923.....	24
JUNALUSKA, Kirk., 1934.....	49	MRS. TINLEY, Bliss, 1919.....	24
JUNIATA, Farr, 1909.....	24	MRS. VALERIE WEST, Bliss, 1925.....	±48
KASHMIR WHITE, Fos., 1912.....	50	MRS. WALTER BREWSTER,	
KATHARINE FAY, Fay, 1943.....	48	Vilm., 1921	S 36
KHEDIVE, Barr, 1884.....	L 24	MULTICOLOR, Lémon, 1840.....	S 24
KING KARL, J. Sass, 1925.....	24	MURILLO, Vilm., 1928.....	S 24
KING TUT, H. P. Sass, 1926.....	48	NARAIN, Shuber, 1936.....	48, 49, 50

NARANJA, Mit., 1935.....	49	SHAH JEHAN, Neel, 1932.....	49
NEBRASKA, H. P. Sass, 1928.....	24	SHASTA, Mohr-Mit., 1927.....	48
NEGLECTA, Horne., 1813.....L	24	SHEKINAH, Sturt., 1918.....	24
NENE, Cay., 1928.....	48	SHELFORD CHIEFTAIN, Fos., 1909..S, R	48
NICÉE, Vilm., 1929.....S	24	SHINING WATERS, Essig, 1933.....	48
NIGHTSHADE, Wmsn., 1932.....±	48	SHOT SILK, Mur., 1932.....	24
NO-WE-TA, H. P. Sass, 1932.....	24	SIEGFRIED, H. P. Sass, 1936.....	48
ODÉON, Vilm., 1924.....S	37	SIERRA BLUE, Essig, 1932.....47, 48, 49	
ODORATISSIMA, Jacquin, 1797.....	24	SIRIUS, Bun., 1923.....S	24
OLD GOLD, H. P. Sass, 1929.....	24	SIR WALTER SCOTT, Farr., 1912.....L	24
OLD PARCHMENT, Klein., 1939.....	48	SNOQUALMIE, Brehm, 1938.....	49
OMAHA, H. P. Sass, 1926.....48, 49		SNOW CARNIVAL, Graves, 1940.....	48
ORIFLAMME, Vilm., 1904.....S	48	SNOWKING, H. P. Sass, 1935.....	48
ORION, Vilm., 1926.....S	50	SNOW WHITE, Sturt., 1926.....	24
ORLOFF, H. P. Sass, 1937.....	48	SONG OF GOLD, Essig, 1937.....48, 49	
ORMACO, Klein., 1941.....	53	SONNY BOY, Kirk., 1939.....	50
ORMOHR, Klein., 1937.....	46	SOQUEL, Reinelt, 1940.....	46
OSSIAN, Sal., 1868.....S	24	SOUV. DE LOETITIA MICHAUD, Mil., 1923	48
OZONE, J. Sass., 1935.....	48	SOUV. DE MME. GAUDICHAU, Mil., 1914	S, R 47
PACQUITA, Barr, 1874.....L	24	SPUN GOLD, Glutzbeck, 1939.....	49
PARISIANA, Vilm., 1911.....	24	STARDOM, D. Hall, 1939.....	47
PAUL VÉRONÈSE, Vilm., 1928.....S	24	ST. CLAIR, Lémon, 1854.....L	24
PEACHBLOW, H. P. Sass, 1942.....	49	STELLA POLARIS, K. Smith, 1939.....	48
PÉGASE, Vilm., 1926.....S	48	STIPPLES, Essig, 1928.....	24
PÉNÉLOPE, Sal., bef. 1859.....L	24	STORM KING, Nic., 1939.....	49
PINK OPAL, J. Sass, 1934.....	24	SUNMIST, Nic., 1932.....	36
PINK RUFFLES, K. Smith, 1939.....	24	SUZANNE AUTISSIER, Den., 1921.....S	48
PLUIE D'OR, Cay., 1928.....	24	TAJ MAHAL, Sturt., 1921.....	24
PLUMED KNIGHT, Sass-Toedt, 1927.....	24	TALISMAN, Mur., 1930.....	24
PRAIRIE GOLD, H. P. Sass, 1926.....	24	TAMERLAN, Vilm., 1904.....S	48
PRAIRIE SUNSET, H. P. Sass, 1939.....	49	TENAYA, Essig, 1933.....	48
PRESIDENT PILKINGTON, Cay., 1931.....	48	TENDRESSE, Van. H., 1854.....L	24
PRIMROSE, Sturt., 1925.....	24	TÉNIERS, Vilm., 1929.....S	24
PRINCE D'ORANGE, Sal., 1873.....S	25	THE ADMIRAL, D. Hall, 1938.....	47
PRINCE OF ORANGE, Klein., 1940.....	49	THE BISHOP, Wash., 1937.....	48
PRINCESS BEATRICE, Barr, 1898.....	24	THE RED DOUGLAS, J. Sass, 1937.....	49
PRINCESS OF TECK, Dessert, 1906.....L	24	THE WHITE SENTINEL, K. Smith, 1941	48
PROFESSEUR MITCHELL, Cay., 1930.....	48	TICONDEROGA, Hudson, 1932.....	36
PULCHERRIMA, Lémon, 1840.....S	24	TIFFANY, H. P. Sass, 1938.....	48
PURISSIMA, Mohr-Mit., 1927.....	47	TITIAN LADY, G. Douglas, 1941.....	48
PURPLE KING, Wallich, 1830.....L	24	TITIAN PRINCESS, G. Douglas, 1943.....	48
QUAKER LADY, Farr, 1909.....S, R	24	TOM TIT, Bliss, 1919.....	24
QUEEN CATERINA, Sturt., 1918.....	36	TREASURE ISLAND, Klein., 1937.....	48
QUEEN OF MAY, Sal., bef. 1859.....S, R	24	TRIPTYCH, Wrhm., 1938.....	50
RADIANT, Salb., 1936.....	45	TROSTRINGER, H. P. Sass, 1926.....	24
RAEJEAN, Whiting, 1939.....	48	TURCO, Vilm., 1921.....S	24
RAFI, Mur., 1933.....	24	UNIQUE, Lémon, 1840.....L	24
RAMESES, H. P. Sass, 1929.....	48	VALOR, Nic., 1922.....	48
RASAKURA, Wmsn., 1922.....	49	VAN DYCK, Vilm., 1926.....S	49
RED ELF, Nic., 1932.....	24	VEGA, Vilm., 1926.....S	24
RED GLEAM, Lap., 1939.....	49	VEISHEA, Whiting, 1940.....48, 49	
RED ROBE, Nic., 1931.....	48	VELOUTÉ, Vilm., 1924.....S	24
RED VALOR, Nic., 1939.....	51	VENUS DE MILO, Ayres, 1931.....	36
REMBRANDT, Cap., 1901.....L	24	VICTORINE, Lémon, 1840.....	24
REVERIE, Sturt., 1920.....	48	VIOLET CROWN, Kirk., 1931.....	48
RHEA, Wmsn., 1918.....	60	VIOLET SYMPHONY, K. Smith, 1939.....	48
RHEINFELS, G. & K., 1928.....	24	VISION, Cay., 1932.....	47
ROMANCE, Mur., 1928.....	24	WABASH, Wmsn., 1936.....	48
ROSE DOMINION, Con., 1931.....±	48	WAKARUSA, Lap., 1941.....	49
ROSE MADDER, Sturt., 1920.....	48	WATTEAU, Vilm., 1926.....S	24
ROSY WINGS, Gage, 1935.....	50	WEST POINT, Nic., 1939.....	47
ROYAL COACH, H. P. Sass, 1939.....	49	WHITE KNIGHT, Saund., 1916.....	24
RUBERRIMA, Barr, 1887.....L	24	WHITE QUEEN, Gey., 1918.....	24
RUBYD, Dykes, 1922.....	24	WHITE VALOR, Nic., 1938.....	47
RUDDIGORE, Mur., 1933.....	24	WILDFIRE, Nic., 1938.....	49
RUTH POLLOCK, H. P. Sass, 1939.....	48	WILLIAM WALLACE, Kelway, 1897.....L	24
SABLE, P. Cook, 1938.....	47	WINNESHIEK, Egel, 1931.....	48
SAMBUCINA, Linn., 1759.....S	24	WINTER CARNIVAL, Schreiner, 1941.....	48
SAMSON, Lémon, 1840.....L	24	W. R. DYKES, Dykes-Orp., 1926.....	47
SANDIA, Wmsn., 1934.....	48	WYOMISSING, Farr, 1909.....	24
SAN FRANCISCO, Mohr-Mit., 1927.....	47	YELLOW JEWEL, K. Smith, 1939.....	46
SAN GABRIEL, Dean, 1921.....	36	ZAMORA, Wmsn., 1929.....	24
SANTA BARBARA, Mohr-Mit., 1925.....	46	ZOUAVE, Vilm., 1922.....S	24
SEDUCTION, Cay., 1933.....	49		
SENSATION, Cay., 1925.....	48		

VARIETY COMMENTS

■ The comments included here under variety names were culled from letters, notes and unpublished articles submitted by our members. In many cases, the material has been considerably condensed and edited, but we have endeavored to make no alterations in the authors' opinions.

ACTION FRONT

A large red with wide segments. Too many lines.—*Geddes Douglas, Nashville, Tenn.*

ADALANTO

Much like NARANJA.—*Geddes Douglas, Nashville, Tenn.*

AMITY

A white washed with light violet-blue. Fine form, flaring falls. The standards are a solid color while the falls are washed with color. Color is heaviest at the haft and lighter near the edges.—*Mrs. F. P. Lowry, Newton, Mass.*

AND THOU

This variety seemed to have its innings in 1944—it bloomed well everywhere. It's a fascinating flower, blue-white with a definite steel blue shading underneath its yellowish beard. I can't make up my mind whether I prefer this one, WHITE CITY or WHITE WEDGEWOOD, all of which are on the same order.—*F. W. Cassebeer, New York, N. Y.*

ALEPPO PLAIN

A mediocre red plicata.—*Geddes Douglas, Nashville, Tenn.*

ANNE NEWHARD

One of the finest iris of the last decade. The judges certainly have slipped up on this one. Its only possible fault is that it has slightly close branching.—*Geddes Douglas, Nashville, Tenn.*

A beautiful flower but a slow propagator, and for this reason does not receive as much attention as it deserves.—*F. W. Cassebeer, New York, N. Y.*

AZALEA

A slightly different shade of pink than EXQUISITE. Matches azalea color in the R. H. S. *Chart*. Not so well branched as EXQUISITE but a definite advance in pink breeding.—*M. J. Barker, Newton, Mass.*

One of Mrs. Nesmith's Congo pinks—a most luscious salmon pink color. These pinks have good form, branching, and substance. A new and exquisite color which was greatly admired in the grower's garden.—*Mrs. F. P. Lowry, Newton, Mass.*

AZURE SKIES

This is a lovely low ruffled lavender.—*Geddes Douglas, Nashville, Tenn.*

After another year, I reiterate that too much cannot be said in praise of this charming pale blue intermediate.—*F. W. Cassebeer, New York, N. Y.*

Good light blue. Very crisp. Excellent substance.—*Amanda C. Hahn, Springfield, Ill.*

BANDMASTER

Enormous flowers of good substance and a nice medium-blue color. I would like it better if the falls were less drooping.—*Geddes Douglas, Nashville, Tenn.*

A fine light blue iris with very little gray tone to it. Tall and well branched. Large flowers.—*Richard Goodman, Riverside, Ill.*

BERKELEY BLUE

Quite similar to BANDMASTER, but grayer. In comparison to both of these, GREAT LAKES looks dull and uninteresting.—*Richard Goodman, Riverside, Ill.*

BERKELEY GOLD

The most outstanding deep yellow I saw this season—a top-notch in this class.—*W. J. McKee, Worcester, Mass.*

BETSY ROSS

A nice semi-flaring lilac iris. Bluer than MELANIE, but pinker than TISHOMINGO—the only one I know of this particular color.—*F. W. Cassebeer, New York, N. Y.*

BLACK BANNER

One of the best deep purples. Velvety.—*Geddes Douglas, Nashville, Tenn.*

Considering all points, I like this the best of all the velvety dark purples. Its color is not so glowing as is that of SABLE, but otherwise it is a better performer, and the flowers have a better shape. To my mind, it is superior also to DOWN EAST and INDIANA NIGHT.—*F. W. Cassebeer, New York, N. Y.*

BLUE DIAMOND

This iris has always performed well in my garden. Its sparkle carries very well.—*M. J. Barker, Newton, Mass.*

BLUE ZENITH

At Mr. Wills', this tall, well formed, medium blue made a gorgeous clump. —*Geddes Douglas, Nashville, Tenn.*

A clear light blue that is very showy in the clump. The class of light blues that carries this color well in the garden is not a large one, as many of the so-called light blues give a gray-lavender cast when viewed in the distance.—*W. J. McKee, Worcester, Mass.*

BONSOR

This old one really put on a show for Mr. Cook. I would not have recognized it. Rich, velvety blue-purple.—*Geddes Douglas, Nashville, Tenn.*

An erratic performer, but when right, it is one of the most appealing of the blue and purple bicolors because of its clarity of color.—*F. W. Cassebeer, New York, N. Y.*

BRIDAL MORN

One of the best balanced whites I saw this year. Light yellow beard with a small yellow patch below it. No reticulations.—*M. J. Barker, Newton, Mass.*

BROWN BUTTERFLY

Medium brown with a blue flush that comes from a distinct blue line on the center of the semi-flaring falls. Erect domed standards and fine low branching.—*M. J. Barker, Newton, Mass.*

CAPTAIN WELLS

Very good dark red similar to Mrs. Whiting's GARDEN GLORY.—*Amanda C. Hahn, Springfield, Ill.*

CARILLON

A bright blend from MIDWEST GEM. Gold and soft rose in color. Flowers are very large. Fairly low. Makes a good clump.—*Geddes Douglas, Nashville, Tenn.*

CASA MORENA

By far the most outstanding iris in the PRAIRIE SUNSET color class.—*Kenneth D. Smith, Staten Island, N. Y.*

An enticing color.—*M. J. Barker, Newton, Mass.*

CHANTILLY

A lovely ruffled lavender-pink with a gold beard and haft. Rather top-branched.—*Geddes Douglas, Nashville, Tenn.*

Good orchid-pink. Very ruffled and frosty-looking.—*Amanda C. Hahn, Springfield, Ill.*

CHIVALRY

Ruffled and flaring flowers of medium blue. Good branching. One of the best iris of the year.—*Geddes Douglas, Nashville, Tenn.*

A real blue iris, a little deeper and a little larger than GREAT LAKES. Excellent branching. Both standards and falls are ruffled at the edges. Very fine iris.—*M. J. Barker, Newton, Mass.*

A fine addition to the medium blue class. A large iris of good form and substance.—*W. J. McKee, Worcester, Mass.*

Although seen only on a one-year plant, the ruffled firm blossoms of clear medium blue were lovely. A clump should give a very blue accent in the garden. Exquisite.—*Mrs. P. E. Corey, Reading, Mass.*

CLIQUE

A very late flowering blend, large blooms with flaring falls. A golden ginger-ale color. Delicate bronzy reticulations over yellow on the haft. Reddish bronzy overlay on the falls. At the tip of the falls, a mauve-

lavender color gives distinction to the flowers.—*Mrs. F. P. Lowry, Newton, Mass.*

COPPER GLOW

A brilliant coppery brown with a golden undertone, a very fine iris in every way. One of the highlights of the 1944 seedling class.—*W. J. McKee, Worcester, Mass.*

COPPER PINK

Probably the best iris in this color class. Very good at Nashville.—*Geddes Douglas, Nashville, Tenn.*

A little slow to become established but well worth waiting for.—*W. J. McKee, Worcester, Mass.*

COURTIER

This new one of Mr. Hall's has the most intense color that I have seen in a pink bud iris. However, it is inclined to be a little thin. I do not like the form nearly so well as I do his No. 44-33.—*Geddes Douglas, Nashville, Tenn.*

DAYBREAK

A very fine golden pink coppery blend. The best all-around blend I saw this year.—*W. J. McKee, Worcester, Mass.*

DEEP NIGHT

A large impressive flower of a grape-juice color with a brushing of brown at the haft and a flush of deep velvety red in the center of the semi-flaring falls. The beard is dark golden brown. It is a well rounded flower. A large clump in Mrs. Corey's garden was very striking.—*Mrs. F. P. Lowry, Newton, Mass.*

DISPLAY

The finest clump in my garden this year. I love the smoothness of the flower.—*Geddes Douglas, Nashville, Tenn.*

An intriguing iris—sometimes extremely dull and, othertimes, unbelievably rich in color. Seems to show to best advantage on a bright cloudy day.—*F. W. Cassebeer, New York, N. Y.*

A very fine deep red that might be described as a large PIUTE.—*Richard Goodman, Riverside, Ill.*

DIVIDEND

A very smooth deep yellow self of heavy substance.—*M. J. Barker, Newton, Mass.*

DOWN EAST

A large globular flower of dark purple, not velvety but rather a self. Closer to DEEP VELVET in color than it is to SABLE, BLACK BANNER or INDIANA NIGHT.—*F. W. Cassebeer, New York, N. Y.*

DREAMCASTLE

Clear, bright, cold lavender-pink. Wide segments and big styles. Stalk not too good.—*Geddes Douglas, Nashville, Tenn.*

DREAM GIRL

Lovely color with no lines. Medium size flower. The pink bud is especially pleasing.—*Geddes Douglas, Nashville, Tenn.*

EASTER CANDLE

A pure white iris with a glow of bright yellow in the throat and slightly brushed down the haft. Its dignity and charm make this iris appropriately named.—*Mrs. F. P. Lowry, Newton, Mass.*

EDNA HICKS

Has great carrying power for a purple-toned iris. Is a prolific grower and a free bloomer, but because it is very early, our visitors usually see only the last bloom.—*Geddes Douglas, Nashville, Tenn.*

A medium-toned violet blend that is very distinct for its color. It deserves greater mention than it has received to date.—*F. W. Cassebeer, New York, N. Y.*

ELEGANS

Unexcelled as a low creamy yellow garden clump.—*Geddes Douglas, Nashville, Tenn.*

We need intermediates with good stalk and branching. This one fills the bill and should be more widely grown.—*F. W. Cassebeer, New York, N. Y.*

ELLA CALLIS

Ordinarily, I do not care for iris that are heavily veined near the haft, but this variety has so many good points that I gladly overlook this shortcoming. It is a large, bold, well branched iris with standards of an intense yellow color and falls of the same color heavily overlaid with brownish orange and with white venations near the haft. The effect from a distance is bright orange. Because of its unusual brilliance and showiness, it is bound to become one of our most useful garden iris.—*F. W. Cassebeer, New York, N. Y.*

ELLEN

A pale blue with a frosty sheen, emphasis on color and form.—*W. J. McKee, Worcester, Mass.*

ELMOHR

I studied this iris in three gardens this year, and I decided to let the other fellow own it. It is unique but too huge for my money.—*M. J. Barker, Newton, Mass.*

The most impressive of all the WILLIAM MOHR progeny. The veinings in both standards and falls are exceedingly attractive and the blossoms are exceptionally well proportioned for so large a flower. The reputation it has achieved is not likely to be fleeting.—*F. W. Cassebeer, New York, N. Y.*

A splendid performer in several gardens. A very, very fine iris.—*W. J. McKee, Worcester, Mass.*

ERIC THE RED

A new brilliant red Siberian iris that surpasses in color previous introductions in the red class. A very outstanding introduction.—*W. J. McKee, Worcester, Mass.*

ETOILE D'OR

One of the deep yellows that is rich in color. It is in a strong competitive class but compares favorably with the best.—*W. J. McKee, Worcester, Mass.*

EXQUISITE

Truest pink I've seen—Congo pink, according to Ridgway. Even the styles carry the same color, and the tangerine beard accentuates the purity and depth of this new pink. No veinings. Excellent branching and substance.—*M. J. Barker, Newton, Mass.*

It seems particularly fitting that it was in Mrs. Nesmith's garden that this iris and AZALEA appeared. These lovely descendants of MELITZA are luscious warm pinks, neither a pale nor a deep pink, glowing but not glaring.—*Mrs. P. E. Corey, Reading, Mass.*

EXTRAVAGANZA

A very fine amoena with white standards and falls of copper, red, and violet. Good branching and substance. A striking iris.—*M. J. Barker, Newton, Mass.*

Surprisingly close to its grandparent, SHAH JEHAN, in general color. However, it is much larger and far superior to its predecessor. Also, color in the falls extends clear to the edges and the standards are whiter.—*F. W. Cassebeer, New York, N. Y.*

A unique iris, derived from ADIOS $\times$ CORTEZ, whose effectiveness lies in the blending of the brown, red and purple of the falls contrasting with the white effect of the standards. Notwithstanding its high branching and only fair form, it has proved at Dongan Hills to have excellent garden value. While advertised as a late bloomer, its flowering period appears very short and hardly extends the length of our tall bearded season.—*Kenneth D. Smith, Staten Island, N. Y.*

FANTASY

Lavender-pink with a tangerine-red beard. Large flowers on a good stalk. You would not think that the color combination was good, but it is really one of the loveliest flowers I have ever seen.—*Geddes Douglas, Nashville, Tenn.*

Large, well shaped pink. One of the most outstanding iris.—*Amanda C. Hahn, Springfield, Ill.*

A lovely new lilac-pink. Very beautiful in form.—*Richard Goodman, Riverside, Ill.*

FIRECRACKER

This low-growing burgundy red plicata was a sensation wherever seen in our New England gardens.—*M. J. Barker, Newton, Mass.*

Outstanding large yellow and red plicata. Very reliable and holds its color well.—*Richard Goodman, Riverside, Ill.*

Effective in the garden, but hardly beautiful.—*F. W. Cassebeer, New York, N. Y.*

FLAMELY

This red self is interesting in the field of so many reds. It carries no

purple, but glows with a light red effect. Fine branching.—*M. J. Barker, Newton, Mass.*

FLORA CAMPBELL

Made one of the best clumps in Jesse Wills' garden. Brown and rose with a nice clean haft. Good branching.—*Geddes Douglas, Nashville, Tenn.*

A truly colorful variegata blend. Comparable to THREE SISTERS in color effect, but the flower is entirely different.—*F. W. Cassebeer, New York, N. Y.*

FRANCELIA

Here is a deep yellow which takes your breath away. It has everything that goes to make up a grand iris.—*M. J. Barker, Newton, Mass.*

A very bright yellow with the same clearness of color as OLA KALA, except that there is a slight amount of white venations near the haft.—*F. W. Cassebeer, New York, N. Y.*

FULL MEASURE

From what I saw of this beautiful deep yellow at Mrs. Tobie's, it will well bear watching.—*M. J. Barker, Newton, Mass.*

I liked this better than LATE SUN from the same hybridizer.—*Amanda C. Hahn, Springfield, Ill.*

GLACIER BLUE

A clear medium blue of unusual substance. Tall, good form, excellent branching, a long season of bloom. A frosty sheen adds to its attractiveness.—*Mrs. F. P. Lowry, Newton, Mass.*

GOLD MEDAL

Mr. Fay's extra early deep yellow that bloomed several days earlier than any tall bearded iris in my garden.—*W. J. McKee, Worcester, Mass.*

Best early yellow I have seen. Good, clear color. Large nicely placed blossoms on a well branched stem.—*Amanda C. Hahn, Springfield, Ill.*

GOLDEN EAGLE

A very fine yellow, hard to beat. A four-star iris.—*Richard Goodman, Riverside, Ill.*

Have seen this in bloom in many gardens from Spartanburg to New York and failed to be impressed with it. In fact, I have discarded it from my own collection of yellows.—*F. W. Cassebeer, New York, N. Y.*

GOLDEN FLEECE

Very tall at Kenneth Smith's. Never noticed before that this one had brown buds.—*Geddes Douglas, Nashville, Tenn.*

A beautiful flower when fully opened, but its growing habits do not live up to the high praise that it has received—it is too prone to rot.—*F. W. Cassebeer, New York, N. Y.*

GOLDEN SPANGLE

One of these new things like GOLDEN FLEECE. The color is very bright, and it has a grand stalk. The substance is somewhat lacking.—*Geddes Douglas, Nashville, Tenn.*

Deeper than GOLDEN FLEECE. Makes a wonderful clump effect. Like it much better than GOLDEN FLEECE.—*M. J. Barker, Newton, Mass.*

GRACE MOHR

Difficult to grow for many of us, but occasionally makes an exhibition stalk that cannot be equaled. This spring at the Cannon garden at Spartanburg, I saw a stalk of it that could have won first prize at any show.—*Kenneth D. Smith, Staten Island, N. Y.*

GRAND CANYON

A very beautiful bronzy red with good garden value. A four-star iris.—*Richard Goodman, Riverside, Ill.*

HARRIET THOREAU

A cold pink, well formed on a good stalk. Much on the order of DREAMCASTLE.—*Geddes Douglas, Nashville, Tenn.*

HIS EXCELLENCY (Smith No. 3-11)

A very large, well shaped flower between LOUVOIS and MARINELLA in color—not dull but smooth, rich and distinctive.—*F. W. Cassebeer, New York, N. Y.*

INDIANA NIGHT

The best of the blue-purples. At Jesse Wills' it put on a show with a stalk bearing four flowers at one time. No faults.—*Geddes Douglas, Nashville, Tenn.*

One of the best deep iris seen this year. The same everywhere. Probably will become very popular.—*M. J. Barker, Newton, Mass.*

JAVA SKY

This seems to have everything—color, branching, substance. The only possible fault may be that the falls are practically the same width all the way down. The color is laid on in waves or bands.—*Geddes Douglas, Nashville, Tenn.*

Its blended colors are softly glowing, yet brilliant. Well branched, large and with fine substance. Its color is Corinthian red to deep vinaceous, copper edges, rich copper hafts. While it pales the second day, it still retains all its charm.—*C. E. F. Gersdorff, Washington, D. C.*

JOAN LAY

I fail to see that this is an improvement over GOLDEN HIND.—*Geddes Douglas, Nashville, Tenn.*

JONQUIL

A yellow reverse bicolor. Harsh lines at haft. Very bright.—*Geddes Douglas, Nashville, Tenn.*

KATHARINE FAY

Nice white. Hardy and a good grower. Well branched.—*Geddes Douglas, Nashville, Tenn.*

Very ruffled white.—*Amanda C. Hahn, Springfield, Ill.*

I have seen this for two successive seasons and would term it better than

any pure white in commerce. It stands 90 degrees temperature without wilting.—*Richard Goodman, Riverside, Ill.*

LADY BOSCAWEN

With the many new yearly introductions, white iris are almost a drug on the market. This refers to good whites that perform well in most regions and rather poorly in others. This iris has withstood most severe weather conditions and performed beautifully. I consider it a most outstanding white.—*W. J. McKee, Worcester, Mass.*

LAKE GEORGE

A flaring medium blue much on the order of GREAT LAKES. It differs in that the haft is slightly narrower and darker. It seems to be the best of Mr. Smith's newer varieties.—*Geddes Douglas, Nashville, Tenn.*

LAKE HURON

Here's one of the very bluest of the medium blues. A notable advancement in eliminating the gray in all the blues. Color carries well in the garden.—*Richard Goodman, Riverside, Ill.*

Very bright medium blue that has entirely too prominent venations in the haft to be a really top-notch iris.—*F. W. Cassebeer, New York, N. Y.*

LATE BREEZE

A lovely ruffled lavender-blue from BALLET GIRL $\times$ GLORIOLE. Ought to be effective in mass.—*Geddes Douglas, Nashville, Tenn.*

A clear unfading blue that has a sparkle like GLORIOLE.—*Amanda C. Hahn, Springfield, Ill.*

LORI MAY

Fades unattractively.—*Geddes Douglas, Nashville, Tenn.*

Another one of Mr. De Forest's art-shade varieties, on the order of SALAR and TONGA, but still a different color. Essentially a cream overlaid with salmony rose fading to a dusty pink. There is some indefinable quality about the color of this iris that causes it to be greatly admired by the majority of iris fanciers but intensely disliked by a few.—*F. W. Cassebeer, New York, N. Y.*

A beautiful low-growing pink—a "must have."—*M. J. Barker, Newton, Mass.*

There's a clean crispness of texture to this iris which makes it distinctive. The light pink standards and darker rose-pink falls are unusually attractive. It is always admired in my garden.—*Mrs. F. P. Lowry, Newton, Mass.*

LOS ANGELES

Introduced in 1927. Award of Merit 1944. Better late than never. Age does not change the good characteristics of an iris. A suggestion might be in order to dust off a few of the neglected good ones of the past two decades.—*W. J. McKee, Worcester, Mass.*

LOTHARIO

A larger AMIGO. Very good.—*Amanda C. Hahn, Springfield, Ill.*

LOUISE BLAKE

Taller at Spartanburg than at Nashville or Staten Island. Even so, at its best, it is a low intermediate. The color contrast is good. The flower has a nice, clean, wide haft. The branching is only fair.—*Geddes Douglas, Nashville, Tenn.*

MANDALAY

A blend of rose and orange. Lovely color.—*Geddes Douglas, Nashville, Tenn.*

MARION VAUGHAN (Smith No. 4-54)

In my opinion, the best seedling Kenneth Smith had this year. A flower of the ELSA SASS type. Broad, well shaped, and with good substance. The color is picric yellow, and the white spot is larger than the one in ELSA SASS.—*Geddes Douglas, Nashville, Tenn.*

If it lives up to its gorgeous first bloom, this iris will rapidly supersede ELSA SASS. Its form, substance, and placement of blossoms are all excellent, and the color has the same lemony tint as ELSA SASS.—*F. W. Cassebeer, New York, N. Y.*

MARY VERNON

A blended variegata with lots of personality.—*Geddes Douglas, Nashville, Tenn.*

MASTER CHARLES

Deep amethyst with a brown haft. Very good.—*Geddes Douglas, Nashville, Tenn.*

MINNIE COLQUITT

A striking flower. Made a fine showing in a clump at the Wills' garden in Nashville.—*Kenneth D. Smith, Staten Island, N. Y.*

MIOBELLE

Deeper and rosier than AUBANEL. Fine 48-inch stalk.—*Geddes Douglas, Nashville, Tenn.*

MISSION MADONNA

Very large, well branched, rich cream self, ruffled and fine in every way.—*C. E. F. Gersdorff, Washington, D. C.*

MOONBEAM

Reverse bicolor with a delightful creamy effect. Large, rounded flowers.—*Geddes Douglas, Nashville, Tenn.*

MOONLIGHT MADONNA

Not very different from ELSA SASS. Bigger and lighter in color.—*Geddes Douglas, Nashville, Tenn.*

I saw this one blooming close to ELSA SASS. They seemed practically alike in height, size, color, branching and form.—*Richard Goodman, Riverside, Ill.*

MOONLIT SEA

An interesting novelty that always elicits a positive reaction for or

against the iris. To those who dislike it, I would recommend that they plant it with yellow iris such as MOONLIGHT MADONNA or ELSA SASS and observe the effect it creates.—*Kenenth D. Smith, Staten Island, N. Y.*

This is a really good one. Very fine deep mauve, yellow at haft, and beautifully veined. Quite different, and we need distinctive ones. Too many iris are much alike.—*Richard Goodman, Riverside, Ill.*

MOUNT HERMON

Excellent blue-white with frilled edges on both standards and falls. Very fine balance to the flower. No reticulations on the haft. Fine branching and sturdy stalk.—*M. J. Barker, Newton, Mass.*

Fine white with glistening sheen. Opens slightly blue but quickly becomes pure white. Tall, floriferous, long-lasting.—*Mrs. P. E. Corey, Reading, Mass.*

NIGHTINGALE

Golden russet, lighter than THE SENTINEL.—*Amanda C. Hahn, Springfield, Ill.*

OLA KALA

This seems to be a fine yellow iris. It had a grand stalk on a one-year plant. Bright with good substance.—*Geddes Douglas, Nashville, Tenn.*

A bit disappointing to me, and I am inclined to believe that it has been over-rated. While undeniably it has a fine, clear, luminous yellow color in a flower of good substance and form, I have never yet seen a well branched stalk of it. The buds are entirely too few. I hardly think it will become one of our top-notch iris.—*F. W. Cassebeer, New York, N. Y.*

A good, well grown yellow, but not outstanding for a new introduction. Plenty of others I like better.—*Richard Goodman, Riverside, Ill.*

OLD ROSE

A rosier MONADNOCK. High branched.—*Geddes Douglas, Nashville, Tenn.*

ORANGE GLOW

Deserving of the H. M. it got this year. It is a taller, bigger, and redder RADIANT.—*Geddes Douglas, Nashville, Tenn.*

I have seen many RADIANT seedlings, but this one is by far the most oustanding. A very fine iris.—*W. J. McKee, Worcester, Mass.*

OVERTURE

Not quite so pink as DREAM GIRL, but flowers are larger. Fair branching.—*Geddes Douglas, Nashville, Tenn.*

One of Mr. Hall's Flamingo pinks. A real pink and does not fade in hot sun as do most of the lavender-pinks. A very fine introduction.—*W. J. McKee, Worcester, Mass.*

PEACH GLOW

A deeper, brighter DAYBREAK.—*Geddes Douglas, Nashville, Tenn.*

PERSIAN PRINCE

A bright variegata with considerable haft markings—a present-day version of KING TUT.—*F. W. Cassebeer, New York, N. Y.*

PINK REFLECTION

Lovely pink with a minimum of yellow. Flowers stiff and flaring.—*Geddes Douglas, Nashville, Tenn.*

My favorite among the new pink blends.—*M. J. Barker, Newton, Mass.*

A very lovely chamois pink. Unique in color and an iris that should have a wide appeal.—*W. J. McKee, Worcester, Mass.*

It is a great pleasure to greet this smooth, soft pink blend after most varieties are on the wane. The very flaring blooms have a lilting airiness but a very lasting quality, remaining in excellent condition for three days. Because the majority of late-bloomers are in darker colors, it is especially pleasing to have this lovely pastel.—*Mrs. P. E. Corey, Reading, Mass.*

POT O' GOLD

Perky and brilliant.—*Geddes Douglas, Nashville, Tenn.*

PREMIER PEACH

Large and tall. This is a blended pink with a lot of creamy tan in it.—*Geddes Douglas, Nashville, Tenn.*

A good peach pink, different from FANTASY; both are what we have been waiting for in pinks.—*Amanda C. Hahn, Springfield, Ill.*

RADIANT NIGHT

A bright variegata blend. Lines at haft.—*Geddes Douglas, Nashville, Tenn.*

RED BONNET

Here is a dark red which many iris lovers have overlooked.—*M. J. Barker, Newton, Mass.*

RED VICTOR

A red self of excellent form, substance, and branching. Made a brilliant mass effect at Mr. Peck's.—*Mrs. F. P. Lowry, Newton, Mass.*

REDWYNE

A red that is well named. Good branching, velvety texture and excellent substance.—*M. J. Barker, Newton, Mass.*

A deep mahogany red that is outstanding in its color class. Velvety in texture and of unusual richness and refinement.—*Mrs. F. P. Lowry, Newton, Mass.*

REDYEN

A fine new red of glowing velvety texture. Fine substance and smooth, unmarked hafts.—*Mrs. P. E. Corey, Reading, Mass.*

REMEMBRANCE

Orchid-pinks usually fade badly in the hot sun, but this one appears to



Kenneth D. Smith

Mr. Hall's pale salmon-pink Remembrance has been in great demand among fanciers.

have sufficient color to withstand the weather. Good form and substance.
—*W. J. McKee, Worcester, Mass.*

ROSE BOWL

A big pinky drooper. Brown lines at haft and a blue line down the center of the falls.—*Geddes Douglas, Nashville, Tenn.*

SEQUATCHIE

In the same color range as JAVA SKY. The medium-size flowers flare and are very stiff. The branching is perfect.—*Geddes Douglas, Nashville, Tenn.*

This iris is reminiscent in form and character of JOY and GOLDEN LIGHT and is just as colorful as either of these, although it has an entirely different combination of tones. I believe we should cultivate more iris of this type.—*F. W. Cassebeer, New York, N. Y.*

A brilliant blend of brown, rose, and violet. When it first opens, it is stunning, but it loses its brilliance later.—*M. J. Barker, Newton, Mass.*

A fine coppery brown blend that is very effective in the clump; tall and very floriferous.—*W. J. McKee, Worcester, Mass.*

SERENATA

A dusty pink blend in the same general color range as PRAIRIE SUNSET but the only one I know of that has flaring falls and no yellow at the haft.—*F. W. Cassebeer, New York, N. Y.*

SHANUNGA BRONZE

A low-growing brown self a shade lighter than the color of the fall of BROWN THRASHER. Has a slight bronze overlay which gives the whole flower a lovely glow. Excellent substance.—*M. J. Barker, Newton, Mass.*

SHARKSKIN

One of the few really good new whites. The placement of flowers reminds me of EASTER MORN, but the individual flowers are larger, better formed, and have more substance. The stalk, while slender, is resistant to wind.—*F. W. Cassebeer, New York, N. Y.*

SIERRA SNOW

This one put on a show. As it bloomed in Jesse Wills' garden, I never saw a better white.—*Geddes Douglas, Nashville, Tenn.*

Snow white without a trace of blue or yellow. Very slow of increase.—*F. W. Cassebeer, New York, N. Y.*

SNOW VELVET

Looked very good this year with its lemon haft.—*Geddes Douglas, Nashville, Tenn.*

In my opinion, the best of the yellow-haft whites. I consider it far superior to ARCTIC, MARY E. NICHOLLS, and GOLDEN TREASURE. From a distance the effect is white. The large flowers have very tough substance and are exceptionally long-lasting.—*F. W. Cassebeer, New York, N. Y.*

SOUSON

A very fine cream with lemon shading and edged with the same lemon yellow color. Excellent branching.—*M. J. Barker, Newton, Mass.*

I liked very much this lemony cream iris of Professor Essig's. It combines beautifully with so many colors and has a charm all its own in partial shade.—*Mrs. P. E. Corey, Reading, Mass.*

A cool, refreshing lemon-cream, medium size with good form and firm substance. Floriferous and blooms over a long period. A fine iris and a welcome addition to a color class in which there are so few.—*Mrs. F. P. Lowry, Newton, Mass.*

SPRING SECRETARY

This must look different in California; otherwise, no one ever would have selected it even in a patch of mediocre seedlings. A mottled color—yellow, tan, and pink.—*Geddes Douglas, Nashville, Tenn.*

STARLIT

This new iris of Geddes Douglas' intrigues me. A deep cream with a delicate bronzy flush extending over the haft and part of the way down the sides of the falls. The blooms are large, ruffled and particularly wide at the haft.—*Mrs. P. E. Corey, Reading, Mass.*

STORM KING

Many remarks have been made about the poor growing qualities of this iris. My experience has been the contrary. It puts on a fine show in my garden with five bloom stalks on a two-year plant. A grand iris.—*M. J. Barker, Newton, Mass.*

STYLE

Opens bright and colorful, but fades to an unattractive yellow. Flowers bunched.—*Geddes Douglas, Nashville, Tenn.*

SUNDIAL

Glistening yellow flushed apricot. Flaring and floriferous. I have seen this for three years, and it gets better each time.—*Geddes Douglas, Nashville, Tenn.*

SUNNY RUFFLES

Beautifully ruffled flower of clear lemon chrome. Well balanced flower on a well branched stalk.—*M. J. Barker, Newton, Mass.*

SUTTER'S GOLD

Light NARANJA type. Good branching.—*Geddes Douglas, Nashville, Tenn.*

SUZETTE

All who visited Mr. Knowlton's garden and saw this beautiful iris were glad that it was originated by him. Its definite but delicate markings of brownish red or maroon on pale yellow are just right. Its form, branching and other characteristics are all of the best.—*Mrs. E. P. Corey, Reading, Mass.*

A cream-yellow plicata stippled with maroon. Its unusually colorful styles give this iris added charm. An outstanding new plicata with garden value.—*Mrs. F. P. Lowry, Newton, Mass.*

SYLVAN BELLE

A white seedling from GLORIOLE. Domed standards with a strong mid-rib and semi-flaring falls. Slight golden reticulations at the haft which lend a glow to the whole flower.—*M. J. Barker, Newton, Mass.*

A warm white iris with a heavy orange beard. Good form and substance and a prolific grower.—*Mrs. F. P. Lowry, Newton, Mass.*

THE ADMIRAL

Smooth medium blue. Low growing. Does well everywhere.—*Geddes Douglas, Nashville, Tenn.*

Medium blue. A good increaser and never fails to bloom. We need more in this class.—*Amanda C. Hahn, Springfield, Ill.*

THE PURPLE HEART

In Mrs. Tobie's lovely Shanunga gardens nothing was more beautiful than her stunning new black-purple seedling, since named THE PURPLE HEART. It has everything one could desire in a rich dark iris. The standards are well held with stiff midribs and are a rich deep purple. The falls are the most velvety I've ever seen, with the velvet finish extending to the very edges and into the haft, which has no visible markings. The stalk is good and the blooms are held with dignity.—*Mrs. P. E. Corey, Reading, Mass.*

Deepest black-purple with heavy velvety texture. Even the beard is purple lightly tipped with gold. There is only the slightest veining deep in the throat. The falls are semi-flaring and nicely rounded; standards, domed; substance, good. Another new gem from Mrs. Tobie's garden.—*Mrs. F. P. Lowry, Newton, Mass.*

THE SENTINEL

Fine in color, but the standards tend to open.—*Geddes Douglas, Nashville, Tenn.*

The bright orangy copper color of this flower is its salient point. Its standards are too open, and its branching is poor.—*F. W. Cassebeer, New York, N. Y.*

Very attractive reddish belnd. One of the must-have's.—*Amanda C. Hahn, Springfield, Ill.*

TIFFANJA

One of the best balanced iris I saw this year. Branching and form, ideal; 42-inch stalk. Very finest of the yellow plicatas.—*M. J. Barker, Newton, Mass.*

At Mrs. Nesmith's this iris had the most perfect stalk of any that I saw last season. The same can be said for the form of the flowers.—*F. W. Cassebeer, New York, N. Y.*

This one received a favorable response from many, including several critics who have crossed plicatas off their favorite list.—*W. J. McKee, Worcester, Mass.*

On a one-year plant this variety has a perfect stalk. Tall with excellent branching and placement and with large flaring blooms. The standards are buff. The falls have a glistening white center with delicate brown markings at the edges. A lovely plicata.—*Mrs. P. E. Corey, Reading, Mass.*

A pale yellow plicata with a light golden brown edging. The broad cream-white falls are slightly veined with tarnished gold on the haft and edged the same as the standards. A freshly opened flower sparkles as though it had been dusted with gold. Very excellent form, substance, and branching.—*Mrs. F. P. Lowry, Newton, Mass.*

TOBACCO ROAD

My choice in the brown class. It has a wide haft and nearly horizontal falls. While it could be a few inches taller, it is nevertheless one of the outstanding iris of the day.—*Kenneth D. Smith, Staten Island, N. Y.*

Very good wherever I saw it. Some say it fades.—*Amanda C. Hahn, Springfield, Ill.*

TYRIAN BEAUTY

Light reddish purple. Made a beautiful clump with ten bloom stalks on a two-year plant.—*M. J. Barker, Newton, Mass.*

VATICAN PURPLE

At Paul Cook's, it was very lovely. The haft was clean, and the color goes well down into the haft. It is a medium-toned blue-purple.—*Geddes Douglas, Nashville, Tenn.*

WAVES

A new warm white with unusually heavy orange beard. Seen in a large clump in Mr. Peck's garden, it made a very fine display.—*Mrs. F. P. Lowry, Newton, Mass.*

Caldwell No. 41-1

I continue to be impressed with this colorful variegata blend. The falls are a very rich red, and the lighter standards are suffused with the same color as the falls. In the sunlight it glows like a beacon.—*F. W. Cassebeer, New York, N. Y.*

Cassebeer No. 28

A bicolor with blue standards and purple falls. In a class with NIGHT-FALL, but has more contrast. Good, clean haft.—*Geddes Douglas, Nashville, Tenn.*

Cassebeer No. 31

MANCHU PRINCE type. Standards, tawny amber; falls, oxblood red. Clean to the haft without any edging.—*Geddes Douglas, Nashville, Tenn.*

Cook No. 5-42

A flaring flower with color similar to that of PRAIRIE SUNSET. Watch for this one—it is good.—*Geddes Douglas, Nashville, Tenn.*

Cook No. 27-5

This light blue seedling bloomed beautifully in Mr. Douglas' garden. Very smooth finish.—*W. J. McKee, Worcester, Mass.*

Cook No. 79-42

About the reddest iris I have ever seen. The standards are clear and the substance is good. Slightly top-branched.—*Geddes Douglas, Nashville, Tenn.*

Douglas No. 43-9

A very large light blue, all parts very wide. Tangarine beard lends an illusive glow.—*Mrs. P. E. Corey, Reading, Mass.*

Fay No. 41-22

A yellow of the color of GOLDEN EAGLE.—*Geddes Douglas, Nashville, Tenn.*

Probably because my initial hybridizing was with yellows, I am more severe in judging iris in this color class, and it is my judgment that this seedling, while lacking a bit in height, more closely approaches perfection in a deep yellow than any other iris I have seen. It is a clear yellow with perfect branching and a strong stalk.—*Kenneth D. Smith, Staten Island, N. Y.*

The deepest yellow iris that I have ever seen.—*Amanda C. Hahn, Springfield, Ill.*

Fay No. 43-9

An extra-good large ruffled white.—*Amanda C. Hahn, Springfield, Ill.*

Fay No. 44-36

A peach-pink bicolor of the pink bud type. Has orangy tangerine beard. Good substance, branching, and form.—*Geddes Douglas, Nashville, Tenn.*

Hall No. 40-44

I like this yellow as well or better than any other. It has a smoothness of texture that is unique. Good color in a flower that is not too large.—*Geddes Douglas, Nashville, Tenn.*

Hall No. 41-52

A light metallic blue with a clean, wide haft. Flowers are of an almost ideal flaring shape.—*Geddes Douglas, Nashville, Tenn.*

Hall No. 44-16

The tallest and largest of Mr. Hall's new pinks. Good color.—*Geddes Douglas, Nashville, Tenn.*

Hall No. 44-17

Good pink with a Chinese red beard. Picotee edging around standards and falls.—*Amanda C. Hahn, Springfield, Ill.*

Hall No. 44-26

Tall, well branched, peachy pink with a light tangerine beard.—*Geddes Douglas, Nashville, Tenn.*

Hall No. 44-33

This seedling is the clearest pink I have ever seen. There is no blue in it. Pink beard.—*Geddes Douglas, Nashville, Tenn.*

A fine light pink self with a deep orange beard.—*Amanda C. Hahn, Springfield, Ill.*

Hall No. 44-39

Large, ruffled peach and light rose blend. The standards and falls are edged with a narrow band of cream. An interesting flower.—*Geddes Douglas, Nashville, Tenn.*

A tan, pink and orchid blend with a gold picotee edging around both standards and falls.—*Amanda C. Hahn, Springfield, Ill.*

Knowlton No. 41-69

A bright copper-rose of exceptional garden value combined with good form, substance, and branching.—*Mrs. F. P. Lowry, Newton, Mass.*

Lapham No. H-18

A variegata blend of the same type as Cassebeer's No. 31, except that the falls are browner and more brilliant in color. The standards are gold flushed burnt orange, and the falls are the same color overlaid with Indian red.—*Geddes Douglas, Nashville, Tenn.*

Loomis No. V-20

Made a nice showing at Kenneth Smith's. Actually, it is a rather small flower. Flares nicely, is not especially pink, but has a bright red beard and a lot of it.—*Geddes Douglas, Nashville, Tenn.*

A sensation in my garden. SPINDRIFT was insignificant in comparison. I consider No. V-20 a gift to hybridizers and conceivably the ideal pink could be bred from it.—*Kenneth D. Smith, Staten Island, N. Y.*

Loomis No. Y-18

Tall green-yellow. Rough.—*Geddes Douglas, Nashville, Tenn.*

Though not so appealing in form of flower, it has a quality lacking in most of our newer yellows—height and good branching.—*F. W. Cassebeer, New York, N. Y.*

Nesmith No. D42-P44

One of those coral pinks with a tangerine beard that has considerably more color than the Loomis seedlings. Tall and exceedingly well branched. Medium-size flowers. Falls are a deeper tone than standards and not too clear.—*F. W. Cassebeer, New York, N. Y.*

Smith's No. 4-5

A smooth, light red-mahogany. Flower a little small for height of stalk. A cross of MATULA $\times$ ORANGE GLOW.—*Geddes Douglas, Nashville, Tenn.*

Smith No. 4-10

A pale pinkish lavender plicata with beautifully formed flowers. Seen at close range, the pastel tints of this iris are truly charming. One of those iris that you can bring indoors without losing the appeal of its color.—*F. W. Cassebeer, New York, N. Y.*

Smith No. 4-19

Heavily marked purple plicata. Slightly bunched, but large, well formed flowers with the edges of the standards and falls crinkled and fluted. Good.—*Geddes Douglas, Nashville, Tenn.*

Smith No. 4-40

A bright golden yellow on the order of PHOEBE.—*Geddes Douglas, Nashville, Tenn.*

A tannish buff of immense size. A very flaring flower of extremely tough substance.—*F. W. Cassebeer, New York, N. Y.*

Smith No. 4-60

A very flaring giant plicata with the coloring of MADAME LOUIS AUREAU, perhaps the forerunner of a new race of plicatas.—*F. W. Cassebeer, New York, N. Y.*

Tobie No. 44-F

One of the best of a series of velvety seedlings from DOWN EAST × SABLE. A blue-purple with great depth of color and plenty of glow.—*M. J. Barker, Newton, Mass.*

Washington No. 4-22

A pale, frosty gray-blue. Nicely formed, medium-size flaring blossoms that are well held on the stalk.—*F. W. Cassebeer, New York, N. Y.*

Whiting No. 413

Beautiful, bright orangy yellow. Nicely ruffled and has good branching. Standards tend to open.—*Geddes Douglas, Nashville, Tenn.*

Wills No. 15-43

On the order of SUNDAY BEST and ARCTIC. Very good.—*Geddes Douglas, Nashville, Tenn.*

Wills No. 104-141

The whitest white I have ever seen. Large tailored flowers with a clean haft. The falls are elliptical.—*Geddes Douglas, Nashville, Tenn.*

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